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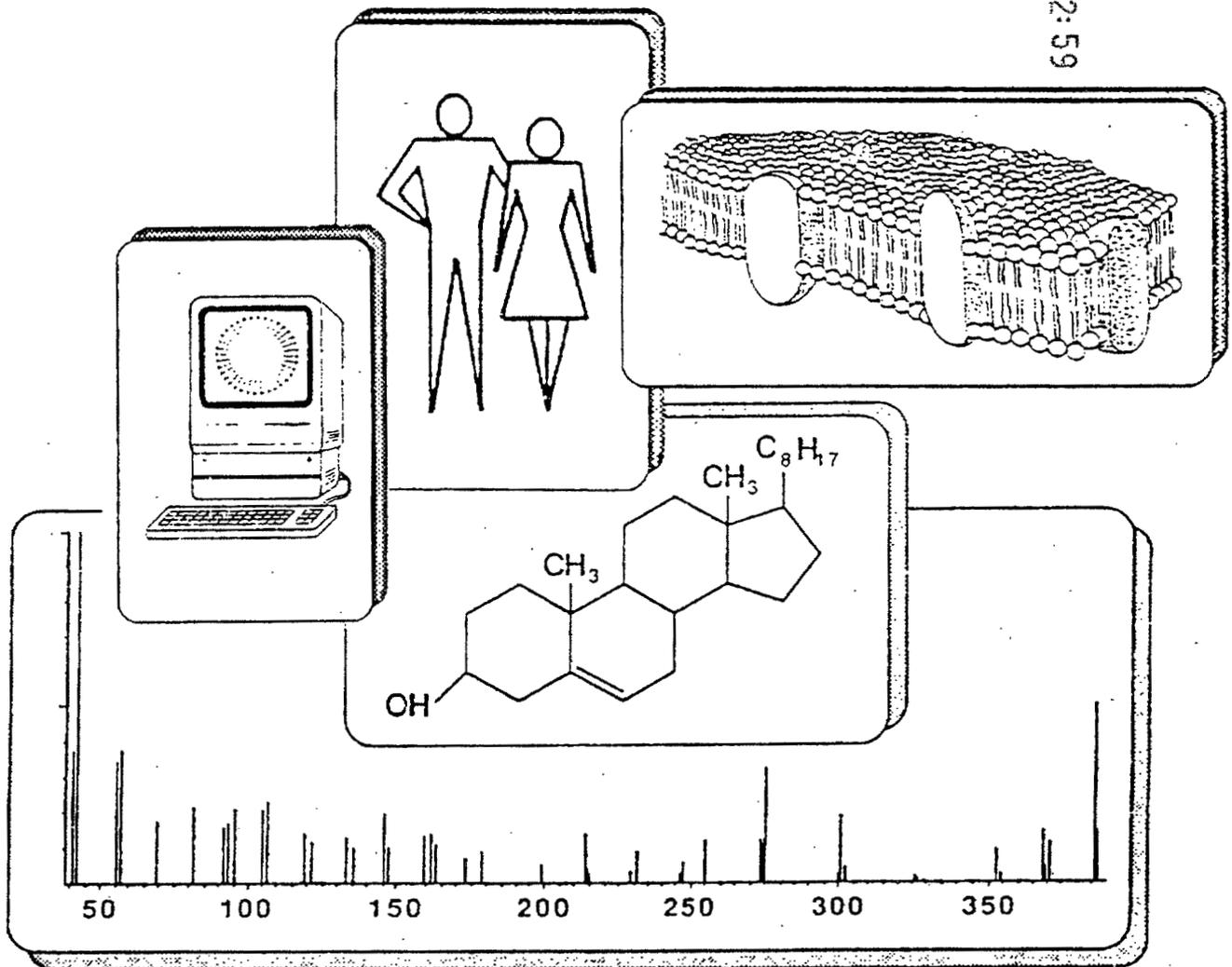
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CHARACTERIZATION OF HRGC/MS UNIDENTIFIED PEAKS FROM THE ANALYSIS OF HUMAN ADIPOSE TISSUE VOLUME II - APPENDICES

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16. ABSTRACT
 The National Human Adipose Tissue Survey (NHATS), administered by ~~EPA/OTS~~, is an ongoing chemical monitoring network designed to detect levels and prevalences of toxic substances in the adipose tissue of the general U.S. population. Adipose specimens collected in fiscal year 1982 were analyzed as composites for volatile and semivolatile organic compounds via HRGC/MS as part of a previous effort. The data files were then processed using a method developed to automatically identify unknown HRGC/MS peaks. The method consisted of automatic identification of unknown spectra via comparisons to reference mass spectra, transfer of the results of the identification step to a microcomputer, compilation of the data into a spreadsheet program and generation of compound identification tables from the spreadsheet. Application of the method to the adipose data resulted in the identification of volatile compounds from 18 separate chemical classes and semivolatiles from 29 chemical classes. Compound classes included saturated and unsaturated hydrocarbons, aldehydes, ketones, steroids, heterocyclic compounds, drugs, aliphatic and phthalate esters, phenols, halocarbons, and methyl-substituted organosiloxanes. Volume I (EPA-560/5-87-002A) describes the technical approach. Volume II (EPA-560/5-87-002B) provides supplemental data.

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CHARACTERIZATION OF HRGC/MS UNIDENTIFIED PEAKS FROM
THE ANALYSIS OF HUMAN ADIPOSE TISSUES

VOLUME II: APPENDICES

by

Jon D. Onstot
Randall E. Ayling
John S. Stanley

FINAL REPORT

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June 30, 1987

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PREFACE

This report describes Midwest Research Institute's approach to characterize unidentified chromatographic peaks in HRGC/MS data collected from the analysis of human adipose tissue for general volatile and semivolatile organic compounds. This report is provided as two separate volumes. Volume I describes the technical approach and presents a summary of the results based on frequency of observation by age group and census region. Volume II is an appendix to Volume I and contains additional details on frequency of occurrence for both identified and unidentified peaks based on census region, census division, and age. This report focuses on the approach to identifying compounds from the HRGC/MS spectra. The frequency of detection of specific compounds is presented. The HRGC/MS data were collected for 46 samples prepared as composites from individual specimens of the U.S. Environmental Protection Agency's fiscal year 1982 (FY82) National Human Adipose Tissue Survey (NHATS) repository. The sample collection, compositing, and the analysis of the composites for specific volatile and semivolatile organic compounds are described in detail in separate reports (Stanley 1986b, Stanley 1986c).

This approach to the characterization of HRGC/MS unidentified peaks was developed and conducted for the EPA's Office of Toxic Substances, Field Studies Branch (EPA Contract No. 68-02-4252, Work Assignment 23, Ms. Janet Remmers, Work Assignment Manager, and Dr. Joseph Breen, Project Officer. This report was prepared by Mr. Jon Onstot with assistance from Mr. Randall E. Ayling and Dr. John S. Stanley, MRI Work Assignment Leader.

MIDWEST RESEARCH INSTITUTE



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APPENDIX A

DOT MATRIX TABLE FOR COMPOUNDS IDENTIFIED IN THE VOLATILE ORGANIC
ANALYSIS DATA SET; VOLATILE ORGANIC COMPOUNDS VS.
CENSUS REGION, CENSUS DIVISION, AND AGE GROUP

Table A-1. Compounds Identified in the Volatile Organic Analysis
Data Set - West Census Region

Index	Compound Class	Compound Name (a)	CENSUS REGION			WEST		
			CENSUS DIVISION			PACIFIC		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
1.S.	Internal Standard	Bromochloropropane - Internal Standard	.	.	.	.	.	.
1	Carbon Dioxide	Carbon dioxide	.	.	.	.	.	.
2	Alkane	2-Methyl-butane	.	.	.	.	.	.
3		Unidentified C5.H10 [Cyclopentane]	.	.	.	.	.	.
4		C3 Substituted cyclopropane [Propyl-cyclopropane]	.	.	.	.	.	.
5		C3 Substituted cyclopropane [Propyl-cyclopropane]	.	.	.	.	.	.
6		2,3-Dimethyl-hexane	.	.	.	.	.	.
7		1,2-Diethyl-cyclobutane	.	.	.	.	.	.
8		Alkane ≥ C10 [Decane]	.	.	.	.	.	.
9		C10 Alkane [2-Methyl-nonane]	.	.	.	.	.	.
10		2,2,3,3-Tetramethyl-hexane	.	.	.	.	.	.
11		Sat. alkane ≥ C11 [2-Methyl-decane]	.	.	.	.	.	.
12		Alkyl substituted hexane [Pentyl-cyclohexane]	.	.	.	.	.	.
13		2,2-Dimethyl-decane	.	.	.	.	.	.
14		C13 Alkane [3,3-Dimethyl-undecane]	.	.	.	.	.	.
15		Alkane [6-Ethyl-2-methyl-decane]	.	.	.	.	.	.
16		Alkane [2,6,7-Trimethyl-decane]	.	.	.	.	.	.
17		Alkane ≥ C11 [5-(1-Methylpropyl)-nonane]	.	.	.	.	.	.
18		C13 Alkane [2,2,7-Trimethyl-decane]	.	.	.	.	.	.
19		3,3,8-Trimethyl-decane	.	.	.	.	.	.
20		Alkane [6-Methyl-tridecane]	.	.	.	.	.	.
21	Alkene	C5 Alkene [1-Pentene]	.	.	.	.	.	.
22		1-Hexene	.	.	.	.	.	.
23		Unidentified C6.H12 [1-Hexene]	.	.	.	.	.	.
24		3-Methyl-1,4-heptadiene	.	.	.	.	.	.
25		1,6-Octadiene	.	.	.	.	.	.
26		1,3,6-Octatriene	.	.	.	.	.	.
27		Unidentified C8.H12 [3-Ethylidene-1-methyl-cyclopentene]	.	.	.	.	.	.
28		1-Nonene	.	.	.	.	.	.
29		3-Ethyl-2-methyl-1,3-hexadiene	.	.	.	.	.	.
30		C10 Ringed alkene [1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-ene]	.	.	.	.	.	.
31		1-Methyl-4-(1-methylethenyl)-cyclohexene	.	.	.	.	.	.
32		7-(1-Methylethylidene)-bicyclo[4.1.0] heptane	.	.	.	.	.	.
33		C11 Alkene [1-Undecene]	.	.	.	.	.	.
34		C11 Alkene [1-Ethenyl-2-hexenyl-cyclopropane]	.	.	.	.	.	.
35		Isomer of Undecen-3-yne [5-Undec-3-yne]	.	.	.	.	.	.
36		Isomer of Undecen-3-yne [5-Undec-3-yne]	.	.	.	.	.	.
37	Arene	C2 Alkyl benzene [1,2-Dimethyl-benzene]	.	.	.	.	.	.
38		C2 Alkyl benzene [1,2-Dimethyl-benzene]	.	.	.	.	.	.
39		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]	.	.	.	.	.	.
40		C3 Alkyl benzene [1-Methylethyl-benzene]	.	.	.	.	.	.
41		Propyl-benzene	.	.	.	.	.	.
42		C3 Alkyl benzene [1-Methyl-2-ethyl benzene]	.	.	.	.	.	.
43		Isomer of tetramethyl benzene [1,2,3,4-Tetramethyl-benzene]	.	.	.	.	.	.
44		1-Methyl-3-(1-methylethyl)- benzene	.	.	.	.	.	.
45		Naphthalene	.	.	.	.	.	.
46		1-Ethylpropyl-benzene	.	.	.	.	.	.
47	Saturated Alcohol	3-Methyl-1-butanol	.	.	.	.	.	.
48		1-Hexanol	.	.	.	.	.	.
49		Isomer of ethyl hexanol [3-Methyl-1-hexanol]	.	.	.	.	.	.
50		2-Ethyl-1-Hexanol	.	.	.	.	.	.
51		Isomer of octanol [1-Octanol]	.	.	.	.	.	.
52		Isomer of octanol [1-Octanol]	.	.	.	.	.	.
53		Unidentified C13.H28.O [1-Tridecanol]	.	.	.	.	.	.
54	Unsaturated Alcohol	Isomer of Octen-ol [3-Octen-2-ol]	.	.	.	.	.	.
55		Isomer of Octen-ol [3-Octen-2-ol]	.	.	.	.	.	.
56	Saturated Aldehyde	Unidentified C5.H10.O [Pentanal]	.	.	.	.	.	.
57		Unidentified C6.H12.O [Hexanal]	.	.	.	.	.	.
58		C7 Aldehyde [Heptanal]	.	.	.	.	.	.
59		Nonanal	.	.	.	.	.	.
60		Decanal	.	.	.	.	.	.
61	Unsaturated Aldehyde	2-Methyl-propenal	.	.	.	.	.	.
62		Isomer of Hexenal [2-Hexenal]	.	.	.	.	.	.
63		Isomer of Hexenal [2-Hexenal]	.	.	.	.	.	.
64		C7 Unsat. aldehyde [2-Heptenal]
65		C7 Unsat. aldehyde [2-Heptenal]
66		2,4-Heptadienal

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Table A-1 (concluded)

Index	Compound Class	Compound Name (a)	CENSUS DIVISION			MOUNTAIN			PACIFIC		
			AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
67		2,4-Nonadienal	.	.	.	.	.	.	.	.
68		Isomer of decenal [2-Decenal]	.	.	.	.	.	.	.	.
69		Isomer of decenal [2-Decenal]	.	.	.	.	.	.	.	.
70		Unsat. aldehyde [2-Decenal]	.	.	.	.	.	.	.	.
71		Unsat. aldehyde [2-Decenal]	.	.	.	.	.	.	.	.
72		Unsat. aldehyde [2-Decenal]	.	.	.	.	.	.	.	.
73		Diene aldehyde [2,4-Decadienal]	.	.	.	.	.	.	.	.
74		Diene aldehyde [2,4-Decadienal]	.	.	.	.	.	.	.	.
75		Diene aldehyde [2,4-Dodecadienal]	.	.	.	.	.	.	.	.
76	Saturated Ketone	C7 Ketone [2-Heptanone]	.	.	.	.	.	.	.	.
77		4-Heptanone	.	.	.	.	.	.	.	.
78		Unidentified C7.H12.O [2,2,3-Trimethyl-cyclobutanone]	.	.	.	.	.	.	.	.
79		C8 Ketone [3-Octanone]	.	.	.	.	.	.	.	.
80		Sat. ketone [2-Decanone]	.	.	.	.	.	.	.	.
81	Unsaturated Ketone	Isomer of Octen-one [3-Octen-2-one]	.	.	.	.	.	.	.	.
82		C8 Ketone [3-Octen-1-one]	.	.	.	.	.	.	.	.
83		3,5-Octadien-2-one	.	.	.	.	.	.	.	.
84		C9 Unsat. ketone [3-Nonen-2-one]	.	.	.	.	.	.	.	.
85	Saturated Ether	Dimethoxy methane	.	.	.	.	.	.	.	.
86	Saturated Ester	Propanoic acid, ethyl ester	.	.	.	.	.	.	.	.
87		C5 Methyl ester [Butanoic acid, methyl ester]	.	.	.	.	.	.	.	.
88		Propanoic acid, propyl ester	.	.	.	.	.	.	.	.
89		Pentanoic acid, methyl ester	.	.	.	.	.	.	.	.
90		C7 Methyl ester [Hexanoic acid, methyl ester]	.	.	.	.	.	.	.	.
91		3-Methyl butanoic acid, ethyl ester	.	.	.	.	.	.	.	.
92		Propanoic acid, butyl ester	.	.	.	.	.	.	.	.
93		2-Methyl propanoic acid, 1-methylethyl ester	.	.	.	.	.	.	.	.
94		Acetic acid, pentyl ester	.	.	.	.	.	.	.	.
95		2-Methyl butanoic acid, ethyl ester	.	.	.	.	.	.	.	.
96		C8 Ethyl ester [Hexanoic acid, ethyl ester]	.	.	.	.	.	.	.	.
97		Acetic acid, hexyl ester	.	.	.	.	.	.	.	.
98		C8 Ester [3-Methyl butanoic acid, propyl ester]	.	.	.	.	.	.	.	.
99		C8 Ester [Butanoic acid, 1-Methylpropyl ester]	.	.	.	.	.	.	.	.
100		C8 Ester [Butanoic acid, 1-Methylpropyl ester]	.	.	.	.	.	.	.	.
101		Octanoic acid, methyl ester	.	.	.	.	.	.	.	.
102		Hexanoic acid, 1-methylethyl ester	.	.	.	.	.	.	.	.
103		Butanoic acid, pentyl ester	.	.	.	.	.	.	.	.
104		Hexanoic acid, 2-methylpropyl ester	.	.	.	.	.	.	.	.
105		Octanoic acid, ethyl ester	.	.	.	.	.	.	.	.
106		C10 Ester [2-Methyl-propanoic acid, hexyl ester]	.	.	.	.	.	.	.	.
107		C11 Ester [Hexanoic acid, pentyl ester]	.	.	.	.	.	.	.	.
108		C11 Ester [4-Methyl pentanoic acid, pentyl ester]	.	.	.	.	.	.	.	.
109		C11 Ester [Hexanoic acid, 2-Methylbutyl ester]	.	.	.	.	.	.	.	.
110		Isomer of octanoic acid [3-Methyl-butyl ester]	.	.	.	.	.	.	.	.
111	Unsaturated Ester	3-Octen-1-ol, acetate	.	.	.	.	.	.	.	.
112	Halocarbon	C5 Bromoalkane [1-Bromopentane]	.	.	.	.	.	.	.	.
113		3-Bromo-Pentane	.	.	.	.	.	.	.	.
114		Brominated alkane ≥ C7 [1-Bromo-heptane]	.	.	.	.	.	.	.	.
115		Dichlorobutane [1,4-dichlorobutane]	.	.	.	.	.	.	.	.
116		2-Bromo-2-chloro-1,1-trifluoro-ethane	.	.	.	.	.	.	.	.
117	Phenol	Isomer of ethyl-phenol [4-Ethyl-phenol]	.	.	.	.	.	.	.	.
118	Heterocycle	Unidentified C8.H14.O [2-Pentyl-furan]	.	.	.	.	.	.	.	.
119	Sulfide	Dimethyl disulfide	.	.	.	.	.	.	.	.
120		Dimethyl trisulfide	.	.	.	.	.	.	.	.
121	Organo-Silicon	Decamethyl-cyclopentasiloxane	.	.	.	.	.	.	.	.

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

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Table A-2. Compounds Identified in the Volatile Organic Analysis
Data Set - South Census Region

Index	Compound Class	Compound Name (a)	CENSUS REGION			SOUTH									
			CENSUS DIVISION			EAST SOUTH CENTRAL		SOUTH ATLANTIC		WEST SOUTH CENTRAL					
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+			
I.S.	Internal Standard	Bromochloropropane - Internal Standard	.	.	.	.	.	.	.	.	.	.	.	.
1	Carbon Dioxide	Carbon dioxide	.	.	.	.	.	.	.	.	.	.	.	.
2	Alkane	2-Methyl-butane	.	.	.	.	.	.	.	.	.	.	.	.
3		Unidentified C5.H10 [Cyclopentane]	.	.	.	.	.	.	.	.	.	.	.	.
4		C3 Substituted cyclopropane [Propyl-cyclopropane]	.	.	.	.	.	.	.	.	.	.	.	.	.
5		C3 Substituted cyclopropane [Propyl-cyclopropane]	.	.	.	.	.	.	.	.	.	.	.	.	.
6		2,3-Dimethyl-hexane	.	.	.	.	.	.	.	.	.	.	.	.	.
7		1,2-Diethyl-cyclobutane	.	.	.	.	.	.	.	.	.	.	.	.	.
8		Alkane ≥ C10 [Decane]	.	.	.	.	.	.	.	.	.	.	.	.	.
9		C10 Alkane [2-Methyl-nonane]	.	.	.	.	.	.	.	.	.	.	.	.	.
10		2,2,3,3-Tetramethyl-hexane	.	.	.	.	.	.	.	.	.	.	.	.	.
11		Sat. alkane ≥ C11 [2-Methyl-decane]	.	.	.	.	.	.	.	.	.	.	.	.	.
12		Alkyl substituted hexane [Pentyl-cyclohexane]	.	.	.	.	.	.	.	.	.	.	.	.	.
13		2,2-Dimethyl-decane	.	.	.	.	.	.	.	.	.	.	.	.	.
14		C13 Alkane [3,3-Dimethyl-undecane]	.	.	.	.	.	.	.	.	.	.	.	.	.
15		Alkane [6-Ethyl-2-methyl-decane]	.	.	.	.	.	.	.	.	.	.	.	.	.
16		Alkane [2,6,7-Trimethyl-decane]	.	.	.	.	.	.	.	.	.	.	.	.	.
17		Alkane ≥ C11 [5-(1-Methylpropyl)-nonane]	.	.	.	.	.	.	.	.	.	.	.	.	.
18		C13 Alkane [2,2,7-Trimethyl-decane]	.	.	.	.	.	.	.	.	.	.	.	.	.
19		3,3,8-Trimethyl-decane	.	.	.	.	.	.	.	.	.	.	.	.	.
20		Alkane [6-Methyl-tridecane]	.	.	.	.	.	.	.	.	.	.	.	.	.
21		Alkene	C5 Alkane [1-Pentene]	.	.	.	.	.	.	.	.	.	.	.	.
22	1-Hexene		.	.	.	.	.	.	.	.	.	.	.	.	.
23	Unidentified C6.H12 [1-Hexene]		.	.	.	.	.	.	.	.	.	.	.	.	.
24	3-Methyl-1,4-heptadiene		.	.	.	.	.	.	.	.	.	.	.	.	.
25	1,6-Octadiene		.	.	.	.	.	.	.	.	.	.	.	.	.
26	1,3,6-Octatriene		.	.	.	.	.	.	.	.	.	.	.	.	.
27	Unidentified C8.H12 [3-Ethylidene-1-methyl-cyclopentene]		.	.	.	.	.	.	.	.	.	.	.	.	.
28	1-Nonene		.	.	.	.	.	.	.	.	.	.	.	.	.
29	3-Ethyl-2-methyl-1,3-hexadiene		.	.	.	.	.	.	.	.	.	.	.	.	.
30	C10 Ringed alkane [1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-ene]		.	.	.	.	.	.	.	.	.	.	.	.	.
31	1-Methyl-4-(1-methylethenyl)-cyclohexene		.	.	.	.	.	.	.	.	.	.	.	.	.
32	7-(1-Methylethylidene)-bicyclo[4.1.0] heptane		.	.	.	.	.	.	.	.	.	.	.	.	.
33	C11 Alkane [1-Undecene]		.	.	.	.	.	.	.	.	.	.	.	.	.
34	C11 Alkene [1-Ethenyl-2-hexenyl-cyclopropane]		.	.	.	.	.	.	.	.	.	.	.	.	.
35	Isomer of Undecen-3-yne [5-Undec-3-yne]		.	.	.	.	.	.	.	.	.	.	.	.	.
36	Isomer of Undecen-3-yne [5-Undec-3-yne]		.	.	.	.	.	.	.	.	.	.	.	.	.
37	Arene	C2 Alkyl benzene [1,2-Dimethyl-benzene]	.	.	.	.	.	.	.	.	.	.	.	.
38		C2 Alkyl benzene [1,2-Dimethyl-benzene]	.	.	.	.	.	.	.	.	.	.	.	.
39		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]	.	.	.	.	.	.	.	.	.	.	.	.
40		C3 Alkyl benzene [1-Methylethyl-benzene]	.	.	.	.	.	.	.	.	.	.	.	.
41		Propyl-benzene	.	.	.	.	.	.	.	.	.	.	.	.	.
42		C3 Alkyl benzene [1-Methyl-2-ethyl benzene]	.	.	.	.	.	.	.	.	.	.	.	.	.
43		Isomer of tetramethyl benzene [1,2,3,4-Tetramethyl-benzene]	.	.	.	.	.	.	.	.	.	.	.	.	.
44		1-Methyl-3-(1-methylethyl)- benzene	.	.	.	.	.	.	.	.	.	.	.	.	.
45		Naphthalene	.	.	.	.	.	.	.	.	.	.	.	.	.
46		1-Ethylpropyl-benzene	.	.	.	.	.	.	.	.	.	.	.	.	.
47	Saturated Alcohol	3-Methyl-1-butanol	.	.	.	.	.	.	.	.	.	.	.	.
48		1-Hexanol	.	.	.	.	.	.	.	.	.	.	.	.
49		Isomer of ethyl hexanol [3-Methyl-1-hexanol]	.	.	.	.	.	.	.	.	.	.	.	.	.
50		2-Ethyl-1-Hexanol	.	.	.	.	.	.	.	.	.	.	.	.	.
51		Isomer of octanol [1-Octanol]	.	.	.	.	.	.	.	.	.	.	.	.	.
52		Isomer of octanol [1-Octanol]	.	.	.	.	.	.	.	.	.	.	.	.	.
53		Unidentified C13.H28.O [1-Tridecanol]	.	.	.	.	.	.	.	.	.	.	.	.	.
54	Unsaturated Alcohol	Isomer of Octen-ol [3-Octen-2-ol]	.	.	.	.	.	.	.	.	.	.	.	.
55		Isomer of Octen-ol [3-Octen-2-ol]	.	.	.	.	.	.	.	.	.	.	.	.	.
56	Saturated Aldehyde	Unidentified C5.H10.O [Pentanal]	.	.	.	.	.	.	.	.	.	.	.	.
57		Unidentified C6.H12.O [Hexanal]	.	.	.	.	.	.	.	.	.	.	.	.
58		C7 Aldehyde [Heptanal]	.	.	.	.	.	.	.	.	.	.	.	.
59		Nonanal	.	.	.	.	.	.	.	.	.	.	.	.
60		Decanal	.	.	.	.	.	.	.	.	.	.	.	.
61	Unsaturated Aldehyde	2-Methyl-propenal	.	.	.	.	.	.	.	.	.	.	.	.
62		Isomer of Hexenal [2-Hexenal]	.	.	.	.	.	.	.	.	.	.	.	.
63		Isomer of Hexenal [2-Hexenal]	.	.	.	.	.	.	.	.	.	.	.	.
64		C7 Unsat. aldehyde [2-Heptenal]	
65		C7 Unsat. aldehyde [2-Heptenal]	
66		2,4-Heptadienal	

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Table A-2 (concluded)

Index	Compound Class	Compound Name (a)	CENSUS REGION			SOUTH								
			CENSUS DIVISION			SOUTH ATLANTIC			WEST SOUTH CENTRAL					
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+		
67		2,4-Nonadienal												
68		Isomer of decenal [2-Decenal]												
69		Isomer of decenal [2-Decenal]												
70		Unsat. aldehyde [2-Decenal]												
71		Unsat. aldehyde [2-Decenal]												
72		Unsat. aldehyde [2-Decenal]												
73		Diene aldehyde [2,4-Decadienal]												
74		Diene aldehyde [2,4-Decadienal]												
75		Diene aldehyde [2,4-Dodecadienal]												
76	Saturated Ketone	C7 Ketone [2-Heptanone]												
77		4-Heptanone												
78		Unidentified C7.H12.O [2,2,3-Trimethyl-cyclobutanone]												
79		C8 Ketone [3-Octanone]												
80		Sat. ketone [2-Decanone]												
81	Unsaturated Ketone	Isomer of Octen-one [3-Octen-2-one]												
82		C8 Ketone [3-Octen-1-one]												
83		3,5-Octadien-2-one												
84		C9 Unsat. ketone [3-Nonen-2-one]												
85	Saturated Ether	Dimethoxy methane												
86	Saturated Ester	Propanoic acid, ethyl ester												
87		C5 Methyl ester [Butanoic acid, methyl ester]												
88		Propanoic acid, propyl ester												
89		Pentanoic acid, methyl ester												
90		C7 Methyl ester [Hexanoic acid, methyl ester]												
91		3-Methyl butanoic acid, ethyl ester												
92		Propanoic acid, butyl ester												
93		2-Methyl propanoic acid, 1-methylethyl ester												
94		Acetic acid, pentyl ester												
95		2-Methyl butanoic acid, ethyl ester												
96		C8 Ethyl ester [Hexanoic acid, ethyl ester]												
97		Acetic acid, hexyl ester												
98		C8 Ester [3-Methyl butanoic acid, propyl ester]												
99		C8 Ester [Butanoic acid, 1-Methylpropyl ester]												
100		C8 Ester [Butanoic acid, 1-Methylpropyl ester]												
101		Octanoic acid, methyl ester												
102		Hexanoic acid, 1-methylethyl ester												
103		Butanoic acid, pentyl ester												
104		Hexanoic acid, 2-methylpropyl ester												
105		Octanoic acid, ethyl ester												
106		C10 Ester [2-Methyl-propanoic acid, hexyl ester]												
107		C11 Ester [Hexanoic acid, pentyl ester]												
108		C11 Ester [4-Methyl pentanoic acid, pentyl ester]												
109		C11 Ester [Hexanoic acid, 2-Methylbutyl ester]												
110		Isomer of octanoic acid [3-Methyl-butyl ester]												
111	Unsaturated Ester	3-Octen-1-ol, acetate												
112	Halocarbon	C5 Bromoalkane [1-Bromopentane]												
113		3-Bromo-Pentane												
114		Brominated alkane \geq C7 [1-Bromo-heptane]												
115		Dichlorobutane [1,4-dichlorobutane]												
116		2-Bromo-2-chloro-1,1,1-trifluoro-ethane												
117	Phenol	Isomer of ethyl-phenol [4-Ethyl-phenol]												
118	Heterocycle	Unidentified C9.H14.O [2-Pentyl-furan]												
119	Sulfide	Dimethyl disulfide												
120		Dimethyl trisulfide												
121	Organo-Silicon	Decamethyl-cyclopentasiloxane												

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

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Table A-3. Compounds Identified in the Volatile Organic Analysis Data Set - North Central Census Region

Index	Compound Class	Compound Name (a)	CENSUS REGION						
			CENSUS DIVISION			NORTH CENTRAL			
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
1.S	Internal Standard	Bromochloropropane - Internal Standard	.	.	.	.	.	.	.
1	Carbon Dioxide	Carbon dioxide	.	.	.	.	.	.	.
2	Alkane	2-Methyl-butane	.	.	.	.	.	.	.
3		Unidentified C5.H10 [Cyclopentane]	.	.	.	.	.	.	.
4		C3 Substituted cyclopropane [Propyl-cyclopropane]	.	.	.	.	.	.	.
5		C3 Substituted cyclopropane [Propyl-cyclopropane]	.	.	.	.	.	.	.
6		2,3-Dimethyl-hexane	.	.	.	.	.	.	.
7		1,2-Diethyl-cyclobutane	.	.	.	.	.	.	.
8		Alkane ≥ C10 [Decane]	.	.	.	.	.	.	.
9		C10 Alkane [2-Methyl-nonane]	.	.	.	.	.	.	.
10		2,2,3,3-Tetramethyl-hexane	.	.	.	.	.	.	.
11		Sat. alkane ≥ C11 [2-Methyl-decane]	.	.	.	.	.	.	.
12		Alkyl substituted hexane [Pentyl-cyclohexane]	.	.	.	.	.	.	.
13		2,2-Dimethyl-decane	.	.	.	.	.	.	.
14		C13 Alkane [3,3-Dimethyl-undecane]	.	.	.	.	.	.	.
15		Alkane [6-Ethyl-2-methyl-decane]	.	.	.	.	.	.	.
16		Alkane [2,6,7-Trimethyl-decane]	.	.	.	.	.	.	.
17		Alkane ≥ C11 [5-(1-Methylpropyl)-nonane]	.	.	.	.	.	.	.
18		C13 Alkane [2,2,7-Trimethyl-decane]	.	.	.	.	.	.	.
19		3,3,8-Trimethyl-decane	.	.	.	.	.	.	.
20		Alkane [6-Methyl-tridecane]	.	.	.	.	.	.	.
21		Alkene	C5 Alkane [1-Pentene]
22	1-Hexene		.	.	.	.	.	.	.
23	Unidentified C6.H12 [1-Hexene]		.	.	.	.	.	.	.
24	3-Methyl-1,4-heptadiene		.	.	.	.	.	.	.
25	1,6-Octadiene		.	.	.	.	.	.	.
26	1,3,6-Octatriene		.	.	.	.	.	.	.
27	Unidentified C6.H12 [3-Ethylidene-1-methyl-cyclopentene]		.	.	.	.	.	.	.
28	1-Nonene		.	.	.	.	.	.	.
29	3-Ethyl-2-methyl-1,3-hexadiene		.	.	.	.	.	.	.
30	C10 Ringed alkane [1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-ene]		.	.	.	.	.	.	.
31	1-Methyl-4-(1-methylethenyl)-cyclohexene		.	.	.	.	.	.	.
32	7-(1-Methylethylidene)-bicyclo[4.1.0]heptane		.	.	.	.	.	.	.
33	C11 Alkene [1-Undecene]		.	.	.	.	.	.	.
34	C11 Alkene [1-Ethenyl-2-hexenyl-cyclopropane]		.	.	.	.	.	.	.
35	Isomer of Undecen-3-yne [5-Undec-3-yne]		.	.	.	.	.	.	.
36	Isomer of Undecen-3-yne [5-Undec-3-yne]		.	.	.	.	.	.	.
37	Arene	C2 Alkyl benzene [1,2-Dimethyl-benzene]	.	.	.	.	.	.	.
38		C2 Alkyl benzene [1,2-Dimethyl-benzene]	.	.	.	.	.	.	.
39		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]	.	.	.	.	.	.	.
40		C3 Alkyl benzene [1-Methylethyl-benzene]	.	.	.	.	.	.	.
41		Propyl-benzene	.	.	.	.	.	.	.
42		C3 Alkyl benzene [1-Methyl-2-ethyl benzene]	.	.	.	.	.	.	.
43		Isomer of tetramethyl benzene [1,2,3,4-Tetramethyl-benzene]	.	.	.	.	.	.	.
44		1-Methyl-3-(1-methylethyl)- benzene	.	.	.	.	.	.	.
45		Naphthalene	.	.	.	.	.	.	.
46		1-Ethylpropyl-benzene	.	.	.	.	.	.	.
47	Saturated Alcohol	3-Methyl-1-butanol	.	.	.	.	.	.	.
48		1-Hexanol	.	.	.	.	.	.	.
49		Isomer of ethyl hexanol [3-Methyl-1-hexanol]	.	.	.	.	.	.	.
50		2-Ethyl-1-Hexanol	.	.	.	.	.	.	.
51		Isomer of octanol [1-Octanol]	.	.	.	.	.	.	.
52		Isomer of octanol [1-Octanol]	.	.	.	.	.	.	.
53		Unidentified C13.H28.O [1-Tridecanol]	.	.	.	.	.	.	.
54	Unsaturated Alcohol	Isomer of Octen-ol [3-Octen-2-ol]	.	.	.	.	.	.	.
55		Isomer of Octen-ol [3-Octen-2-ol]	.	.	.	.	.	.	.
56	Saturated Aldehyde	Unidentified C5.H10.O [Pentanal]	.	.	.	.	.	.	.
57		Unidentified C6.H12.O [Hexanal]	.	.	.	.	.	.	.
58		C7 Aldehyde [Heptanal]	.	.	.	.	.	.	.
59		Nonanal	.	.	.	.	.	.	.
60		Decanal	.	.	.	.	.	.	.
61	Unsaturated Aldehyde	2-Methyl-propenal	.	.	.	.	.	.	.
62		Isomer of Hexenal [2-Hexenal]	.	.	.	.	.	.	.
63		Isomer of Hexenal [2-Hexenal]	.	.	.	.	.	.	.
64		C7 Unsat. aldehyde [2-Heptenal]	.	.	.	.	.	.	.
65		C7 Unsat. aldehyde [2-Heptenal]	.	.	.	.	.	.	.
66		2,4-Heptadienal	.	.	.	.	.	.	.

000012

Table A-3 (concluded)

CENSUS REGION			NORTH CENTRAL						
CENSUS DIVISION			EAST NORTH CENTRAL		WEST NORTH CENTRAL				
Index	Compound Class	Compound Name (a)	AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
67		2,4-Nonadienal		.	.	.	.	.	.
68		Isomer of decenal [2-Decenal]		.	.	.	.	.	.
69		Isomer of decenal [2-Decenal]		.	.	.	.	.	.
70		Unsat. aldehyde [2-Decenal]		.	.	.	.	.	.
71		Unsat. aldehyde [2-Decenal]		.	.	.	.	.	.
72		Unsat. aldehyde [2-Decenal]		.	.	.	.	.	.
73		Diene aldehyde [2,4-Decadienal]		.	.	.	.	.	.
74		Diene aldehyde [2,4-Decadienal]		.	.	.	.	.	.
75		Diene aldehyde [2,4-Dodecadienal]		.	.	.	.	.	.
76	Saturated Ketone	C7 Ketone [2-Heptanone]		.	.	.	.	.	.
77		4-Heptanone		.	.	.	.	.	.
78		Unidentified C7.H12.O [2,2,3-Triethyl-cyclobutanone]		.	.	.	.	.	.
79		C8 Ketone [3-Octanone]		.	.	.	.	.	.
80		Sat. ketone [2-Decanone]		.	.	.	.	.	.
81	Unsaturated Ketone	Isomer of Octen-one [3-Octen-2-one]		.	.	.	.	.	.
82		C8 Ketone [3-Octen-1-one]		.	.	.	.	.	.
83		3,5-Octadien-2-one		.	.	.	.	.	.
84		C9 Unsat. ketone [3-Nonen-2-one]		.	.	.	.	.	.
85	Saturated Ether	Dimethoxy methane		.	.	.	.	.	.
86	Saturated Ester	Propanoic acid, ethyl ester		.	.	.	.	.	.
87		C5 Methyl ester [Butanoic acid, methyl ester]		.	.	.	.	.	.
88		Propanoic acid, propyl ester		.	.	.	.	.	.
89		Pentanoic acid, methyl ester		.	.	.	.	.	.
90		C7 Methyl ester [Hexanoic acid, methyl ester]		.	.	.	.	.	.
91		3-Methyl butanoic acid, ethyl ester		.	.	.	.	.	.
92		Propanoic acid, butyl ester		.	.	.	.	.	.
93		2-Methyl propanoic acid, 1-methylethyl ester		.	.	.	.	.	.
94		Acetic acid, pentyl ester		.	.	.	.	.	.
95		2-Methyl butanoic acid, ethyl ester		.	.	.	.	.	.
96		C8 Ethyl ester [Hexanoic acid, ethyl ester]		.	.	.	.	.	.
97		Acetic acid, hexyl ester		.	.	.	.	.	.
98		C8 Ester [3-Methyl butanoic acid, propyl ester]		.	.	.	.	.	.
99		C8 Ester [Butanoic acid, 1-Methylpropyl ester]		.	.	.	.	.	.
100		C8 Ester [Butanoic acid, 1-Methylpropyl ester]		.	.	.	.	.	.
101		Octanoic acid, methyl ester		.	.	.	.	.	.
102		Hexanoic acid, 1-methylethyl ester		.	.	.	.	.	.
103		Butanoic acid, pentyl ester		.	.	.	.	.	.
104		Hexanoic acid, 2-methylpropyl ester		.	.	.	.	.	.
105		Octanoic acid, ethyl ester		.	.	.	.	.	.
106		C10 Ester [2-Methyl-propanoic acid, hexyl ester]		.	.	.	.	.	.
107		C11 Ester [Hexanoic acid, pentyl ester]		.	.	.	.	.	.
108		C11 Ester [4-Methyl pentanoic acid, pentyl ester]		.	.	.	.	.	.
109		C11 Ester [Hexanoic acid, 2-Methylbutyl ester]		.	.	.	.	.	.
110		Isomer of octanoic acid [3-Methyl-butyl ester]		.	.	.	.	.	.
111	Unsaturated Ester	3-Octen-1-ol, acetate		.	.	.	.	.	.
112	Halocarbon	C5 Bromoalkane [1-Bromopentane]		.	.	.	.	.	.
113		3-Bromo-Pentane		.	.	.	.	.	.
114		Brominated alkane ≥ C7 [1-Bromo-heptane]		.	.	.	.	.	.
115		Dichlorobutane [1,4-dichlorobutane]		.	.	.	.	.	.
116		2-Bromo-2-chloro-1,1,1-trifluoro-ethane		.	.	.	.	.	.
117	Phenol	Isomer of ethyl-phenol [4-Ethyl-phenol]		.	.	.	.	.	.
118	Heterocycle	Unidentified C9.H14.O [2-Pentyl-furan]		.	.	.	.	.	.
119	Sulfide	Dimethyl disulfide		.	.	.	.	.	.
120		Dimethyl trisulfide		.	.	.	.	.	.
121	Organo-Silicon	Decamethyl-cyclopentasiloxane		.	.	.	.	.	.

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table A-4. Compounds Identified in the Volatile Organic Analysis
Data Set - Northeast Census Region

Index	Compound Class	Compound Name (s)	CENSUS REGION			NORTHEAST		
			CENSUS DIVISION			NEW ENGLAND		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
1.S	Internal Standard	Bromochloropropane - Internal Standard	.	.	.	.	.	.
1	Carbon Dioxide	Carbon dioxide	.	.	.	.	.	.
2	Alkane	2-Methyl-butane	.	.	.	.	.	.
3		Unidentified C5.H10 [Cyclopentane]	.	.	.	.	.	.
4		C3 Substituted cyclopropane [Propyl-cyclopropane]	.	.	.	.	.	.
5		C3 Substituted cyclopropane [Propyl-cyclopropane]	.	.	.	.	.	.
6		2,3-Dimethyl-hexane	.	.	.	.	.	.
7		1,2-Diethyl-cyclobutane	.	.	.	.	.	.
8		Alkane ≥ C10 [Decane]	.	.	.	.	.	.
9		C10 Alkane [2-Methyl-nonane]	.	.	.	.	.	.
10		2,2,3,3-Tetramethyl-hexane	.	.	.	.	.	.
11		Sat. alkane ≥ C11 [2-Methyl-decane]	.	.	.	.	.	.
12		Alkyl substituted hexane [Pentyl-cyclohexane]	.	.	.	.	.	.
13		2,2-Dimethyl-decane	.	.	.	.	.	.
14		C13 Alkane [3,3-Dimethyl-undecane]	.	.	.	.	.	.
15		Alkane [6-Ethyl-2-methyl-decane]	.	.	.	.	.	.
16		Alkane [2,6,7-Trimethyl-decane]	.	.	.	.	.	.
17		Alkane ≥ C11 [5-(1-Methylpropyl)-nonane]	.	.	.	.	.	.
18		C13 Alkane [2,2,7-Trimethyl-decane]	.	.	.	.	.	.
19		3,3,8-Trimethyl-decane	.	.	.	.	.	.
20		Alkane [6-Methyl-tridecane]	.	.	.	.	.	.
21	Alkene	C5 Alkane [1-Pentene]	.	.	.	.	.	.
22		1-Hexene	.	.	.	.	.	.
23		Unidentified C6.H12 [1-Hexene]	.	.	.	.	.	.
24		3-Methyl-1,4-heptadiene	.	.	.	.	.	.
25		1,6-Octadiene	.	.	.	.	.	.
26		1,3,6-Octatriene	.	.	.	.	.	.
27		Unidentified C8.H12 [3-Ethylidene-1-methyl-cyclopentene]	.	.	.	.	.	.
28		1-Nonene	.	.	.	.	.	.
29		3-Ethyl-2-methyl-1,3-hexadiene	.	.	.	.	.	.
30		C10 Ringed alkane [1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-ene]	.	.	.	.	.	.
31		1-Methyl-4-(1-methylethenyl)-cyclohexene	.	.	.	.	.	.
32		7-(1-Methylethylidene)-bicyclo[4.1.0] heptane	.	.	.	.	.	.
33		C11 Alkene [1-Undecene]	.	.	.	.	.	.
34		C11 Alkene [1-Ethanyl-2-hexenyl-cyclopropane]	.	.	.	.	.	.
35		Isomer of Undecen-3-yne [5-Undec-3-yne]	.	.	.	.	.	.
36		Isomer of Undecen-3-yne [5-Undec-3-yne]	.	.	.	.	.	.
37	Arene	C2 Alkyl benzene [1,2-Dimethyl-benzene]	.	.	.	.	.	.
38		C2 Alkyl benzene [1,2-Dimethyl-benzene]	.	.	.	.	.	.
39		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]	.	.	.	.	.	.
40		C3 Alkyl benzene [1-Methylethyl-benzene]	.	.	.	.	.	.
41		Propyl-benzene	.	.	.	.	.	.
42		C3 Alkyl benzene [1-Methyl-2-ethyl benzene]	.	.	.	.	.	.
43		Isomer of tetramethyl benzene [1,2,3,4-Tetramethyl-benzene]	.	.	.	.	.	.
44		1-Methyl-3-(1-methylethyl)- benzene	.	.	.	.	.	.
45		Naphthalene	.	.	.	.	.	.
46		1-Ethylpropyl-benzene	.	.	.	.	.	.
47	Saturated Alcohol	3-Methyl-1-butanol	.	.	.	.	.	.
48		1-Hexanol	.	.	.	.	.	.
49		Isomer of ethyl hexanol [3-Methyl-1-hexanol]	.	.	.	.	.	.
50		2-Ethyl-1-Hexanol	.	.	.	.	.	.
51		Isomer of octanol [1-Octanol]	.	.	.	.	.	.
52		Isomer of octanol [1-Octanol]	.	.	.	.	.	.
53		Unidentified C13.H28.O [1-Tridecanol]	.	.	.	.	.	.
54	Unsaturated Alcohol	Isomer of Octen-ol [3-Octen-2-ol]	.	.	.	.	.	.
55		Isomer of Octen-ol [3-Octen-2-ol]	.	.	.	.	.	.
56	Saturated Aldehyde	Unidentified C5.H10.O [Pentanal]	.	.	.	.	.	.
57		Unidentified C6.H12.O [Hexanal]	.	.	.	.	.	.
58		C7 Aldehyde [Heptanal]	.	.	.	.	.	.
59		Nonanal	.	.	.	.	.	.
60		Decanal	.	.	.	.	.	.
61	Unsaturated Aldehyde	2-Methyl-propenal	.	.	.	.	.	.
62		Isomer of Hexenal [2-Hexenal]	.	.	.	.	.	.
63		Isomer of Hexenal [2-Hexenal]	.	.	.	.	.	.
64		C7 Unsat. aldehyde [2-Heptenal]	.	.	.	.	.	.
65		C7 Unsat. aldehyde [2-Heptenal]	.	.	.	.	.	.
66		2,4-Heptadienal	.	.	.	.	.	.

000014

Table A-4 (concluded)

Index	Compound Class	Compound Name (a)	CENSUS REGION			NORTHEAST		
			CENSUS DIVISION			NEW ENGLAND		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
67		2,4-Nonadienal	..	..	..	.	.	.
68		Isomer of decenal [2-Decenal]		..	..	.	.	.
69		Isomer of decenal [2-Decenal]		..	..	.	.	.
70		Unsat. aldehyde [2-Decenal]	..	.	.	.	.	.
71		Unsat. aldehyde [2-Decenal]	..	.	.	.	.	.
72		Unsat. aldehyde [2-Decenal]	..	..	..	.	.	.
73		Diene aldehyde [2,4-Decadienal]		..	..	.	.	.
74		Diene aldehyde [2,4-Decadienal]		..	..	.	.	.
75		Diene aldehyde [2,4-Dodecadienal]	..			.	.	.
76	Saturated Ketone	C7 Ketone [2-Heptanone]	..			.	.	.
77		4-Heptanone	..	..	..	.	.	.
78		Unidentified C7.H12.O [2,2,3-Trimethyl-cyclobutanone]		..	..	.	.	.
79		C8 Ketone [3-Octanone]		..	..	.	.	.
80		Sat. ketone [2-Decanone]		..	..	.	.	.
81	Unsaturated Ketone	Isomer of Octen-one [3-Octen-2-one]		..	..	.	.	.
82		C8 Ketone [3-Octen-1-one]		..	..	.	.	.
83		3,5-Octadien-2-one		..	..	.	.	.
84		C9 Unsat. ketone [3-Nonen-2-one]		..	..	.	.	.
85	Saturated Ether	Dimethoxy methane						
86	Saturated Ester	Propanoic acid, ethyl ester	..	.	.
87		C5 Methyl ester [Butanoic acid, methyl ester]						
88		Propanoic acid, propyl ester						
89		Pentanoic acid, methyl ester						
90		C7 Methyl ester [Hexanoic acid, methyl ester]	..	..	.	.	.	.
91		3-Methyl butanoic acid, ethyl ester						
92		Propanoic acid, butyl ester						
93		2-Methyl propanoic acid, 1-methylethyl ester						
94		Acetic acid, pentyl ester		.	.			
95		2-Methyl butanoic acid, ethyl ester						
96		C8 Ethyl ester [Hexanoic acid, ethyl ester]	..	.	.	.	.	.
97		Acetic acid, hexyl ester	..					
98		C8 Ester [3-Methyl butanoic acid, propyl ester]						
99		C8 Ester [Butanoic acid, 1-Methylpropyl ester]						
100		C8 Ester [Butanoic acid, 1-Methylpropyl ester]						
101		Octanoic acid, methyl ester	..	..	.	.	.	.
102		Hexanoic acid, 1-methylethyl ester						
103		Butanoic acid, pentyl ester		.	.	.	.	.
104		Hexanoic acid, 2-methylpropyl ester						
105		Octanoic acid, ethyl ester	..	..	..	.	.	.
106		C10 Ester [2-Methyl-propanoic acid, hexyl ester]						
107		C11 Ester [Hexanoic acid, pentyl ester]	..	.	.	.	.	.
108		C11 Ester [4-Methyl pentanoic acid, pentyl ester]						
109		C11 Ester [Hexanoic acid, 2-Methylbutyl ester]						
110		Isomer of octanoic acid [3-Methyl-butyl ester]		..	.	.	.	.
111	Unsaturated Ester	3-Octen-1-ol, acetate						
112	Halocarbon	C5 Bromoalkane [1-Bromopentane]						
113		3-Bromo-Pentane						
114		Brominated alkane ≥ C7 [1-Bromo-heptane]						
115		Dichlorobutane [1,4-dichlorobutane]						
116		2-Bromo-2-chloro-1,1,1-trifluoro-ethane						
117	Phenol	Isomer of ethyl-phenol [4-Ethyl-phenol]						
118	Heterocycle	Unidentified C9.H14.O [2-Pentyl-furan]	..	.	..	.	.	.
119	Sulfide	Dimethyl disulfide						
120		Dimethyl trisulfide						
121	Organo-Silicon	Decamethyl-cyclopentasiloxane	.					

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

APPENDIX B

DOT MATRIX TABLE FOR COMPOUNDS IDENTIFIED IN THE 6% FLORISIL SEMIVOLATILE
ORGANIC ANALYSIS DATA SET; SEMIVOLATILE ORGANIC COMPOUNDS VS.
CENSUS REGION, CENSUS DIVISION, AND AGE GROUP

Table B-1. Compounds Identified in the 6% Florisil Semivolatile Organic Analysis Data Set. - West Census Region

Index	Compound Class	Compound (a)	CENSUS DIVISION			PACIFIC		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
I.S.	Internal Standard	D10-Anthracene						
1	Alkane	2,6,10,14-Tetramethyl-hexadecane						
2		2,6,10,14-Tetramethyl-nonadecane						
3		Alkane ≥ C18 [2,6,10,14,19-Pentamethyl eicosane]						
4	Saturated Ketone	1,2,4-Cyclopentanone						
5	Saturated Ester	12-Methyl-tridecanoic acid, methyl ester						
6		Nonanedioic acid, bis(1-methylpropyl) ester						
7		9-Octadecanoic acid, ethyl ester						
8	Sulfide	Methyl 2-methyl-1-(methylthio)butyl disulfide						
9		Dimethyl trisulfide						
10	Dipeptide	Glycine, anhydride						
11	Alkene	C5 Substituted naphthalene						
		[Octahydro-tetramethyl-1H-cyclopropan]A[naphthalene]						
12		Hexahydro-4,7-dimethyl-1-(1-methylethyl)-naphthalene...						
13		5-Ethylidene-1-methyl-cycloheptene						
14		C30 Unsat. hydrocarbon [Hexamethyl-tetracosahexane]						
15		Ylangene						
16	Unsaturated Aldehyde	2-Butyl-2-octenal						
17		Unidentified C9.H8.O [Cyclooctatetraene-1-carboxaldehyde]						
18	Unsaturated Amine	N,N-Dimethyl-3-octen-2-amine						
19	Unsaturated Ketone	6,10-Dimethyl-5,9-undecadien-2-one						
20	Arene	C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]						
21		2-Ethyl-1,3-dimethyl-benzene						
22		C4 Alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]						
23		C4 Alkyl benzene [Diethyl benzene]						
24		C4 Alkyl benzene [Methyl(1-methylethyl)-benzene]						
25		Cyclohexyl-benzene						
26		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]						
27		C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]						
28		C5 Alkyl benzene [1-Ethyl-4-(1-methylethyl)-benzene]						
29		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]						
30		C3 Alkyl benzene [1-Ethyl-2-methyl-benzene]						
31		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]						
32		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]						
33		C4 Alkyl benzene [1-Ethyl-2,4-dimethyl-benzene]						
34		2-Methyl-naphthalene						
35		Unidentified C10.H12 [2,3-Dihydro-1-methyl-1H-Indene]						
36		Unidentified C15.H24 [Hexahydro-tetramethyl-1H-benzocycloheptene]						
37		Unsat. C4 alkyl benzene [4-Ethenyl-1,2-dimethyl-benzene]						
38		2-Propenyl-benzene						
39		Unidentified C10.H12 [2,3-Dihydro-1H-Indene]						
40		4-Pentyl-benzaldehyde						
41	Aromatic Ketone	Unidentified C9.H8.O [2,3-Dihydro-1H-Inden-1-one]						
42		1-Phenyl-ethanone						
43	Phenol	2,6-Bis(1,1-dimethylethyl)-4-methyl-phenol						
44		[1,1'-Biphenyl]-2-ol						
45		2,2'-Methylenebis[6-(1,1-dimethylethyl)-4-methyl-phenol]						
46	Aromatic Ester	Benzenepranoic acid, ethyl ester						
47	Aromatic Ether	1,1'-Oxybis-benzene						
48		1-Methoxy-4-(1-propenyl)-benzene						
49	Aromatic Amine	C2 Alkyl benzenamine [3,5-Dimethyl-benzenamine]						
50	Aromatic Oxime	4-Methyl benzaldehyde, oxime						
51	Thiocyanic Ester	Thiocyanic acid, phenyl ester						
52	Heterocyclic Compound	2,3,5-Trimethyl-1H-pyrrole						
53		Unidentified C8.H7.N [1H-Indole]						
54		Unidentified C8.H7.N [Indolizine]						
55		2-(Methylthio)-benzothiazole						
56		5-(2-Propenyl)-1,3-Benzodioxole						
57		1,4-Dioxaspiro[4.6]undec-7-ene						
58		2,4-Dihydro-2,5-dimethyl-3H-pyrazol-3-one						

Table B-1 (concluded)

Index	Compound Class	Compound (a)	CENSUS DIVISION			MOUNTAIN			PACIFIC			
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
59		5,5-Diethyl-2,4-imidazolidinedione										
60	Steroid	(5. Alpha.)-cholest-3-ene										
61		(3. Beta.)- Cholest-5-en-3-ol acetate										
62		Cholest-5-en-3-ol (3. beta.), propanoate										
63		Cholest-5-en-3-one										
64		Cholest-5-ene										
65		(5. Alpha.)-cholest-7-en-3-one										
66		Cholesta-3,5-dien-7-one										
67		(3. Beta.)-cholesta-4,6-dien-3-ol benzoate										
68		Cholestérol										
69		Isomer of cholestenol [5-cholesten-3-ol propionate]										
70	Pregnane, (5. alpha.)-											
71	(3. Beta.)-26,27-dinorergost-5-en-3-ol benzoate											
72	Chlorinated Hydrocarbon	1,1-Dichloro-1-propene										
73		(4-Chlorophenyl)phenyl-methanone										
74		2-Chloro-6-methyl-benzonitrile										
75		Dichlorobenzene [1,3-dichloro-benzene]										
76		Lindane										
77		DDD										
78	Organo-Silicon	Isomer of decamethyl-cyclopentasiloxane										
79		Octamethyl-cyclotetrasiloxane										
80		Isomer of decamethyl-cyclopentasiloxane										
81	Phthalate	Diheptyl phthalate										

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table B-2. Compounds Identified in the 6% Florisil Semivolatile Organic Analysis Data Set - South Census Region

Index	Compound Class	Compound (a)	CENSUS REGION			SOUTH			WEST SOUTH CENTRAL		
			CENSUS DIVISION			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
I.S.	Internal Standard	D10-Anthracene			..	..	....	....		..
1	Alkane	2,6,10,14-Tetramethyl-hexadecane			..	..	..	..		..
2		2,6,10,14-Tetramethyl-nonadecane					..	..	
3		Alkane ≥ C18 [2,6,10,14,19-Pentamethyl eicosane]									
4	Saturated Ketone	1,2,4-Cyclopentanone									
5	Saturated Ester	12-Methyl-indecanoic acid, methyl ester									
6		Nonanedioic acid, bis(1-methylpropyl) ester									
7		9-Octadecanoic acid, ethyl ester					..	..	..	..	..
8	Sulfide	Methyl 2-methyl-1-(methylthio)butyl disulfide									
9		Dimethyl trisulfide									
10	Dipeptide	Glycine, anhydride									
11	Alkene	C5 Substituted naphthalene									
		[Octahydro-tetramethyl-1H-cyclopropan]A[naphthalene]									
12		Hexahydro-4,7-dimethyl-1-(1-methylethyl)-naphthalene...									
13		5-Ethylidene-1-methyl-cycloheptene			..	..			
14		C30 Unsat. hydrocarbon [Hexamethyl-tetracosahexaene]									
15		Ylangene									
16	Unsaturated Aldehyde	2-Butyl-2-octenal									
17		Unidentified C9.H8.O [Cyclooctatetraene-1-carboxaldehyde]									
18	Unsaturated Amine	N,N-Dimethyl-3-octen-2-amine									
19	Unsaturated Ketone	6,10-Dimethyl-5,9-undecadien-2-one									
20	Arene	C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]									
21		2-Ethyl-1,3-dimethyl-benzene									
22		C4 Alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]									
23		C4 Alkyl benzene [Diethyl benzene]									
24		C4 Alkyl benzene [Methyl(1-methylethyl)-benzene]									
25		Cyclohexyl-benzene									
26		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]									
27		C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]									
28		C5 Alkyl benzene [1-Ethyl-4-(1-methylethyl)-benzene]									
29		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]									
30		C3 Alkyl benzene [1-Ethyl-2-methyl-benzene]									
31		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]									
32		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]									
33		C4 Alkyl benzene [1-Ethyl-2,4-dimethyl-benzene]									
34		2-Methyl-naphthalene									
35		Unidentified C10.H12 [2,3-Dihydro-1-methyl-1H-indene]									
36		Unidentified C15.H24 [Hexahydro-tetramethyl-1H-benzocycloheptene]									
37		Unsat. C4 alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]									
38		2-Propenyl-benzene									
39	Aromatic Aldehyde	Benzaldehyde									
40		4-Pentyl-benzaldehyde									
41	Aromatic Ketone	Unidentified C8.H8.O [2,3-Dihydro-1H-Inden-1-one]									
42		1-Phenyl-ethanone									
43	Phenol	2,6-Bis(1,1-dimethylethyl)-4-methyl-phenol									
44		[1,1'-Biphenyl]-2-ol									
45		2,2'-Methylenebis[6-(1,1-dimethylethyl)-4-methyl-phenol]									
46	Aromatic Ester	Benzenepropanoic acid, ethyl ester									
47	Aromatic Ether	1,1'-Oxybis-benzene			..	..	....	....		..
48		1-Methoxy-4-(1-propenyl)-benzene									
49	Aromatic Amine	C2 Alkyl benzenamine [3,5-Dimethyl-benzenamine]									
50	Aromatic Oxime	4-Methyl benzaldehyde, oxime									
51	Thiocyanic Ester	Thiocyanic acid, phenyl ester									
52	Heterocyclic Compound	2,3,5-Trimethyl-1H-pyrrole									
53		Unidentified C8.H7.N [1H-Indole]									
54		Unidentified C8.H7.N [Indolizine]									
55		2-(Methylthio)-benzothiazole									
56		5-(2-Propenyl)-1,3-Benzodioxole									
57		1,4-Dioxaspiro[4.6]undec-7-ene									
58		2,4-Dihydro-2,5-dimethyl-3H-pyrazol-3-one									
59		5,5-Diethyl-2,4-imidazolidinedione									
60	Steroid	(5. Alpha.)-cholest-3-ene									
61		(3. Beta.)- Cholest-5-en-3-ol acetate									

Table B-2 (concluded)

Index	Compound Class	Compound (a)	CENSUS REGION			SOUTH			WEST SOUTH CENTRAL												
			CENSUS DIVISION			SOUTH ATLANTIC			WEST SOUTH CENTRAL												
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+									
62		Cholest-5-en-3-ol- (3.beta.)-, propanoate																			
63		Cholest-5-en-3-one																			
64		Cholest-5-ene																			
65		(5.Alpha.)-cholest-7-en-3-one																			
66		Cholesta-3,5-dien-7-one																			
67		(3.Beta.)-cholesta-4,6-dien-3-ol benzoate																			
68		Cholesterol																			
69		Isomer of cholesterol [5-cholesten-3-ol propionate]																			
70		Pregnane, (5.alpha.)-																			
71		(3.Beta.)-26,27-dinoregost-5-en-3-ol benzoate																			
72	Chlorinated Hydrocarbon	1,1-Dichloro-1-propene																			
73		(4-Chlorophenyl)phenyl-methanone																			
74		2-Chloro-6-methyl-benzonitrile																			
75		Dichlorobenzene [1,3-dichloro-benzene]																			
76		Lindane																			
77		DDD																			
78	Organo-Silicon	Isomer of decamethyl-cyclopentasiloxane																			
79		Octamethyl-cyclotetrasiloxane																			
80		Isomer of decamethyl-cyclopentasiloxane																			
81	Phthalate	Diheptyl phthalate																			

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table B-3. Compounds Identified in the 6% Florisil Semivolatile Organic Analysis Data Set - North Central Census Region

Index	Compound Class	Compound (a)	CENSUS REGION			NORTH CENTRAL						
			CENSUS DIVISION	EAST NORTH CENTRAL		WEST NORTH CENTRAL						
				AGE GROUP	0-14	15-44	45+	0-14	15-44	45+		
IS.	Internal Standard	D10-Anthracene										
1	Alkane	2,6,10,14-Tetramethyl-hexadecane										
2		2,6,10,14-Tetramethyl-nonadecane										
3		Alkane ≥ C18 [2,6,10,14,19-Pentamethyl eicosane]										
4	Saturated Ketone	1,2,4-Cyclopentanone										
5	Saturated Ester	12-Methyl-tridecanoic acid, methyl ester										
6		Nonanedioic acid, bis(1-methylpropyl) ester										
7		9-Octadecenoic acid, ethyl ester										
8	Sulfide	Methyl 2-methyl-1-(methylthio)butyl disulfide										
9		Dimethyl trisulfide										
10	Dipeptide	Glycine, anhydride										
11	Alkene	C5 Substituted naphthalene										
		[Octahydro-tetramethyl-1H-cyclopropan(A)naphthalene]										
12		Hexahydro-4,7-dimethyl-1-(1-methylethyl)-naphthalene...										
13		5-Ethylidene-1-methyl-cycloheptene										
14		C30 Unsat. hydrocarbon [Hexamethyl-tetracosahexaene]										
15		Ylangene										
16	Unsaturated Aldehyde	2-Butyl-2-octenal										
17		Unidentified C9.H8.O [Cyclooctatetraene-1-carboxaldehyde]										
18	Unsaturated Amine	N,N-Dimethyl-3-octen-2-amine										
19	Unsaturated Ketone	6,10-Dimethyl-5,9-undecadien-2-one										
20	Arene	C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]										
21		2-Ethyl-1,3-dimethyl-benzene										
22		C4 Alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]										
23		C4 Alkyl benzene [Diethyl benzene]										
24		C4 Alkyl benzene [Methyl(1-methylethyl)-benzene]										
25		Cyclohexyl-benzene										
26		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]										
27		C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]										
28		C5 Alkyl benzene [1-Ethyl-4-(1-methylethyl)-benzene]										
29		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]										
30		C3 Alkyl benzene [1-Ethyl-2-methyl-benzene]										
31		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]										
32		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]										
33		C4 Alkyl benzene [1-Ethyl-2,4-dimethyl-benzene]										
34		2-Methyl-naphthalene										
35		Unidentified C10.H12 [2,3-Dihydro-1-methyl-1H-Indene]										
36		Unidentified C15.H24 [Hexahydro-tetramethyl-1H-benzocycloheptene]										
37		Unsat. C4 alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]										
38		2-Propenyl-benzene										
39	Aromatic Aldehyde	Benzaldehyde										
40		4-Pentyl-benzaldehyde										
41	Aromatic Ketone	Unidentified C9.H8.O [2,3-Dihydro-1H-Inden-1-one]										
42		1-Phenyl-ethanone										
43	Phenol	2,6-Bis(1,1-dimethylethyl)-4-methyl-phenol										
44		[1,1'-Biphenyl]-2-ol										
45		2,2'-Methylenebis[6-(1,1-dimethylethyl)-4-methyl-phenol]										
46	Aromatic Ester	Benzenepropanoic acid, ethyl ester										
47	Aromatic Ether	1,1'-Oxybis-benzene										
48		1-Methoxy-4-(1-propenyl)-benzene										
49	Aromatic Amine	C2 Alkyl benzenamine [3,5-Dimethyl-benzenamine]										
50	Aromatic Oxime	4-Methyl benzaldehyde, oxime										
51	Thiocyanic Ester	Thiocyanic acid, phenyl ester										
52	Heterocyclic Compound	2,3,5-Trimethyl-1H-pyrrole										
53		Unidentified C8.H7.N [1H-Indole]										
54		Unidentified C8.H7.N [Indolizine]										
55		2-(Methylthio)-benzothiazole										
56		5-(2-Propenyl)-1,3-Benzodioxole										
57		1,4-Dioxaspiro[4.6]undec-7-ene										
58		2,4-Dihydro-2,5-dimethyl-3H-pyrazol-3-one										
59		5,5-Diethyl-2,4-imidazolidinedione										
60	Steroid	(5.alpha.)-cholest-3-ene										
61		(3.beta.)- Cholest-5-en-3-ol acetate										
62		Cholest-5-en-3-ol (3.beta.), propanoate										

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Table B-3 (concluded)

Index	Compound Class	Compound (a)	CENSUS REGION			NORTH CENTRAL		
			CENSUS DIVISION			WEST NORTH CENTRAL		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
63		Cholest-5-en-3-one						
64		Cholest-5-ene						
65		(5 Alpha.)-cholest-7-en-3-one						
66		Cholesta-3,5-dien-7-one						
67		(3 Beta.)-cholesta-4,6-dien-3-ol benzoate						
68		Cholesterol						
69		Isomer of cholesterol [5-cholesten-3-ol propionate]	.	.	.	.	.	.
70		Pregnane, (5.alpha.)-	.	.	.	.	.	.
71		(3 Beta.)-26,27-dinoregost-5-en-3-ol benzoate						
72	Chlorinated Hydrocarbon	1,1-Dichloro-1-propene						
73		(4-Chlorophenyl)phenyl-methanone						
74		2-Chloro-6-methyl-benzonitrile						
75		Dichlorobenzene [1,3-dichloro-benzene]	.	.	.	.	.	.
76		Lindane	.	.	.	.	.	.
77		DDD	.	.	.	.	.	.
78	Organo-Silicon	Isomer of decamethyl-cyclopentasiloxane		.	.	.	.	.
79		Octamethyl-cyclotetrasiloxane		.	.	.	.	.
80		Isomer of decamethyl-cyclopentasiloxane		.	.	.	.	.
81	Phthalate	Diheptyl phthalate						

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

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Table B-4. Compounds Identified in the 6% Florisil Semivolatile Organic Analysis Data Set - Northeast Census Region

Index	Compound Class	Compound (a)	CENSUS REGION			NORTHEAST		
			CENSUS DIVISION			NEW ENGLAND		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
IS.	Internal Standard	D10-Anthracene	.	.	.	.	.	.
1	Alkane	2,6,10,14-Tetramethyl-hexadecane	.	.	.	.	.	.
2		2,6,10,14-Tetramethyl-nonadecane	.	.	.	.	.	.
3		Alkane ≥ C18 [2,6,10,14,18-Pentamethyl eicosane]	.	.	.	.	.	.
4	Saturated Ketone	1,2,4-Cyclopentanone	.	.	.	.	.	.
5	Saturated Ester	12-Methyl-tridecanoic acid, methyl ester	.	.	.	.	.	.
6		Nonanedioic acid, bis(1-methylpropyl) ester	.	.	.	.	.	.
7		9-Octadecenoic acid, ethyl ester	.	.	.	.	.	.
8	Sulfide	Methyl 2-methyl-1-(methylthio)butyl disulfide	.	.	.	.	.	.
9		Dimethyl trisulfide	.	.	.	.	.	.
10	Dipeptide	Glycine, anhydride	.	.	.	.	.	.
11	Alkene	C5 Substituted naphthalene [Octahydro-tetramethyl-1H-cyclopropan[A]naphthalene]	.	.	.	.	.	.
12		Hexahydro-4,7-dimethyl-1-(1-methylethyl)-naphthalene...	.	.	.	.	.	.
13		5-Ethylidene-1-methyl-cycloheptene	.	.	.	.	.	.
14		C30 Unsat. hydrocarbon [Hexamethyl-tetracosahexaene]	.	.	.	.	.	.
15		Ylangene	.	.	.	.	.	.
16	Unsaturated Aldehyde	2-Butyl-2-octenal	.	.	.	.	.	.
17		Unidentified C9.H8.O	.	.	.	.	.	.
18	Unsaturated Amine		.	.	.	.	.	.
19	Unsaturated Ketone		.	.	.	.	.	.
20		2-Ethyl-1,3-dimethyl-benzene	.	.	.	.	.	.
21		2-Ethyl-1,3-dimethyl-benzene	.	.	.	.	.	.
22		C4 Alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]	.	.	.	.	.	.
23		C4 Alkyl benzene [Diethyl benzene]	.	.	.	.	.	.
24		C4 Alkyl benzene [Methyl(1-methylethyl)-benzene]	.	.	.	.	.	.
25		Cyclohexyl-benzene	.	.	.	.	.	.
26		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]	.	.	.	.	.	.
27		C4 Alkyl benzene [1-Ethyl-2,3-dimethyl benzene]	.	.	.	.	.	.
28		C5 Alkyl benzene [1-Ethyl-4-(1-methylethyl)-benzene]	.	.	.	.	.	.
29		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]	.	.	.	.	.	.
30		C3 Alkyl benzene [1-Ethyl-2-methyl-benzene]	.	.	.	.	.	.
31		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]	.	.	.	.	.	.
32		C3 Alkyl benzene [1,3,5-Trimethyl-benzene]	.	.	.	.	.	.
33		C4 Alkyl benzene [1-Ethyl-2,4-dimethyl-benzene]	.	.	.	.	.	.
34		2-Methyl-naphthalene	.	.	.	.	.	.
35		Unidentified C10.H12 [2,3-Dihydro-1-methyl-1H-Indene]	.	.	.	.	.	.
36		Unidentified C15.H24 [Hexahydro-tetramethyl-1H-benzocycloheptene]	.	.	.	.	.	.
37		Unsat. C4 alkyl benzene [4-Ethyl-1,2-dimethyl-benzene]	.	.	.	.	.	.
38		2-Propenyl-benzene	.	.	.	.	.	.
39	Aromatic Aldehyde	Benzaldehyde	.	.	.	.	.	.
40		4-Pentyl-benzaldehyde	.	.	.	.	.	.
41	Aromatic Ketone	Unidentified C9.H8.O [2,3-Dihydro-1H-Inden-1-one]	.	.	.	.	.	.
42		1-Phenyl-ethanone	.	.	.	.	.	.
43	Phenol	2,6-Bis(1,1-dimethylethyl)-4-methyl-phenol	.	.	.	.	.	.
44		[1,1'-Biphenyl]-2-ol	.	.	.	.	.	.
45		2,2'-Methylenebis[6-(1,1-dimethylethyl)-4-methyl-phenol]	.	.	.	.	.	.
46	Aromatic Ester	Benzenepropanoic acid, ethyl ester	.	.	.	.	.	.
47	Aromatic Ether	1,1'-Oxybis-benzene	.	.	.	.	.	.
48		1-Methoxy-4-(1-propenyl)-benzene	.	.	.	.	.	.
49	Aromatic Amine	C2 Alkyl benzenamine [3,5-Dimethyl-benzenamine]	.	.	.	.	.	.
50	Aromatic Oxime	4-Methyl benzaldehyde, oxime	.	.	.	.	.	.
51	Thiocyanic Ester	Thiocyanic acid, phenyl ester	.	.	.	.	.	.
52	Heterocyclic Compound	2,3,5-Trimethyl-1H-pyrrole	.	.	.	.	.	.
53		Unidentified C8 H7 N [1H-Indole]	.	.	.	.	.	.
54		Unidentified C8 H7 N [Indolizine]	.	.	.	.	.	.
55		2-(Methylthio)-benzothiazole	.	.	.	.	.	.
56		5-(2-Propenyl)-1,3-Benzodioxole	.	.	.	.	.	.
57		1,4-Dioxaspiro[4.6]undec-7-ene	.	.	.	.	.	.
58		2,4-Dihydro-2,5-dimethyl-3H-pyrazol-3-one	.	.	.	.	.	.
59		5,5-Diethyl-2,4-imidazolidinadione	.	.	.	.	.	.
60	Steroid	(5.alpha.)-cholest-3-ene	.	.	.	.	.	.
61		(3.Beta.)- Cholest-5-en-3-ol acetate	.	.	.	.	.	.
62		Cholest-5-en-3-ol (3.beta.)-. propanoate	.	.	.	.	.	.

Table B-4 (concluded)

Index	Compound Class	Compound (a)	CENSUS REGION			NORTHEAST				
			CENSUS DIVISION			NEW ENGLAND				
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	
63		Cholest-5-en-3-one								
64		Cholest-5-ene								.
65		(5.alpha.)-cholest-7-en-3-one								.
66		Cholesta-3,5-dien-7-one								.
67		(3.Beta.)-cholesta-4,6-dien-3-ol benzoate								.
68		Cholesterol								.
69		Isomer of cholesterol [5-cholesten-3-ol propionate]	..	..	..	.	.	.	.	.
70		Pregnane, (5.alpha.)-	.							.
71		(3.Beta.)-26,27-dinorergost-5-en-3-ol benzoate								.
72	Chlorinated Hydrocarbon	1,1-Dichloro-1-propene								
73		(4-Chlorophenyl)phenyl-methanone								
74		2-Chloro-6-methyl-benzonitrile								
75		Dichlorobenzene [1,3-dichloro-benzene]				.	.	.	.	.
76		Lindane	.			.	.	.	.	.
77		DDD				.	.	.	.	.
78	Organo-Silicon	Isomer of decamethyl-cyclopentasiloxane	.	.	.					.
79		Octamethyl-cyclotetrasiloxane	..		..					.
80		Isomer of decamethyl-cyclopentasiloxane								.
81	Phthalate	Diheptyl phthalate								

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

APPENDIX C

DOT MATRIX TABLE FOR COMPOUNDS IDENTIFIED IN THE 15/50% FLORISIL SEMIVOLATILE
ORGANIC ANALYSIS DATA SET; SEMIVOLATILE ORGANIC COMPOUNDS VS.
CENSUS REGION, CENSUS DIVISION, AND AGE GROUP

Table C-1. Compounds Identified in the 15/50% Florisil Semivolatile Organic Analysis Data Set - West Census Region

Index	Compound Class	Compound (a)	CENSUS REGION			WEST		
			CENSUS DIVISION			PACIFIC		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
IS.	Internal Standard	D10-Anthracene - Internal Standard	.	.	.	.	.	.
1	Alkane	Unidentified C10.H20 [Diethyl cyclohexane]						
2	Saturated Ester	1,7,7-Trimethyl-bicyclo[2.2.1]heptan-2-ol, exo propanoate-						
3		Dodecanoic acid, ethyl ester						
4		Hexanedioic acid, mono(2-ethylhexyl) ester						
5		Alkyl ester [15-Methyl-heptadecanoate]						
6		Saturated Polyfunctional	Ethyldrazone propionaldehyde					
7		9-Oxo-nonanoic acid, ethyl ester						
8	Alkene	1-Methyl-3-(1-methylethenyl)-cyclohexene						
9	Unsaturated Aldehyde	Trimethyl-3-cyclohexene-1-carboxaldehyde						
10		2-Butyl-2-octenal	.	.	.	.	.	.
11	Unsaturated Ketone	3-Methyl-3-Buten-2-one, dimer						
12		2,4,6-Cycloheptatriene-1-one						
13		5-Undecen-4-one						
14		5-Ethyl-2-methyl-4-heptens-3-one						
15	Unsaturated Polyfunctional	Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]						
16		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]						
17		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]	.	.	.	.	.	.
18		2-Methoxy-2-octen-4-one						
19	Alkyne	5,5-Dimethyl-3-heptyne						
20	Arene	C3-Alkyl benzene [1,3,5-trimethyl-benzene]	.	.	.	.	.	.
21		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]						
22		C3-Alkyl benzene [1,2,4-trimethyl-benzene]						
23		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]						
24		Unidentified C11.H10 [1-Ethylidene-indene]						
25	Aromatic Aldehyde	Benzaldehyde						
26		Unidentified C10.H10.O [Alpha-ethylidene-benzeneacetaldehyde]						
27		Unidentified C10.H10.O [Alpha-ethylidene-benzeneacetaldehyde]						
28	Aromatic Ketone	1-Phenyl-ethanone						
29	Aromatic Amide	N-Methyl-1-naphthalenecarboxamide						
30	Aromatic Carboxylate Derivative	Benzenepropanoic acid, .beta.,.beta.-dimethyl-						
31		2-(acetylamino)-benzoic acid, methyl ester						
32		Benzenepropanoic acid, ethyl ester						
33		Benzenepropanoic acid						
34	Phthalic Acid Derivative	Butyl decyl phthalate						
35		Isomer of diheptyl phthalate						
36		Isomer of diheptyl phthalate						
37		Butyl phthalate, ester with butyl glycolate						
38		Unidentified phthalate						
39	Phenol	Methyl phenol [2-Methyl-phenol]						
40		[1,1'-Biphenyl]-2-ol						
41		2-Naphthalenol						
42	Aromatic Polyfunctional	1,3-Dimethoxy-benzene						
43		1-Phenyl-1,2-butanediol						
44		2-Ethoxy-benzaldehyde						
45		Unidentified C7.H5.O.N.S [Thiocyanic acid, 4-hydroxyphenyl ester]						
46	Drug	Methaqualone						
47		Unidentified barbiturate [5-Ethyl-1,3-dimethyl pyrimidinetrione]						
48		Alkyl substituted pyrimidinetrione [Mephobarbital]						
49		Alkyl substituted pyrimidinetrione [Pentobarbital]						
50		Alkyl substituted pyrimidinetrione [Phenobarbital]						
51		Alkyl substituted pyrimidinetrione [Metharbital]						
52		Alkyl substituted pyrimidinetrione [Metharbital]						
53		Heterocyclic Compound	1,7-Naphthyridine					
54	Isomer of dimethyl-piperidine [1,4-Dimethyl-piperidine]							
55	3-Pyridinecarboxaldehyde, oxime							
56	4-Pyridinecarboxaldehyde							
57	Unidentified C8.H7.N [Indolizine]							
58	C2 Alkyl pyrazine [2,6-Dimethyl pyrazine]							
59	2-Methoxy-3-methyl-pyrazine							

Table C-1 (concluded)

Index	Compound Class	Compound (a)	CENSUS REGION			WEST		
			CENSUS DIVISION			PACIFIC		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
60		1,2-Benzisothiazole						
61		Unidentified C7.H11.N.S [2-Methyl-4-propyl-thiazole]						
62		Alkyl thiazole [4-Ethyl-5-methyl-thiazole]	*					
63		4-Propyl-thiazole						
64		1,3-Benzodioxole						
65		4,7-Dimethyl-3(2H)-benzofuranone						
66		Unidentified C11.H16.O2 [Tetrahydro-trimethyl-2(4H)-benzofuranone]		*				
67		5-(Butylimino)-2(5H)-furanone						
68		2H-1-Benzopyran-2-one						
69		1,3,5-Trimethyl-1H-pyrazole						
70		Isomer of thienyl-ethanone [1-(3-Thienyl)-ethanone]	*					
71		1-(4-Hydroxy-3-thienyl)-ethanone	*					
72		2,3,4-trimethyl thiophene						
73		2-Methyl-5-propyl-thiophene						
74		2-t-Butoxy-thiophene	*					
75	Steroid	Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]	*	*	*	*	*	*
76		Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]	*	*	*	*	*	*
77		Cholest-5-en-3-ol (3.beta.), propanoate	*	*	*	*	*	*
78		Cholest-5-en-3-one	*	*	*	*	*	*
79		Cholest-5-ene	*	*	*	*	*	*
80		Isomer of cholest-en-ol [4-Methyl-cholest-8(14)-en-3-ol]	*	*	*	*	*	*
81		Cholesta-3,5-dien-7-one	*	*	*	*	*	*
82		Cholesta-4,6-dien-3-ol (3.Beta.), Benzoate	*	*	*	*	*	*
83		Cholesta-5,7-dien-3-ol, (3.beta.)	*	*	*	*	*	*
84		Isomer of cholestanol [Cholestanol]	*	*	*	*	*	*
85		Methyl-cholestan-3-ol, (3.beta.,5.alpha.,6.beta.)-	*	*	*	*	*	*
86		3-(Acetoxy)-cholestan-6-one, (3.beta,5.alpha.)-	*	*	*	*	*	*
87		Cholestane-3,5-diol, (3.beta.,5.alpha.)-	*	*	*	*	*	*
88		Cholestanol	*	*	*	*	*	*
89		Cholesterol	*	*	*	*	*	*
90	Halogenated Hydrocarbon	1-Chloro-4-(Methylsulfonyl)-benzene						
91		Isomer of fluoro-methyl-benzene [1-Fluoro-2-methyl-benzene]						
92		Carbonochloridothioic acid, S-methyl ester	*				*	*
93		1,1-Dichloro-ethene	*					
94		4-Chloro-2-(phenylmethyl)-phenol						
95	Organo-Silicon	1-Butynyl-trimethyl silane		*				
96		Trimethyl((1-methyl-2-propynyl)oxy)-silane						

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

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Table C-2. Compounds Identified in the 15/50% Florisil Semivolatile Organic Analysis Data Set - South Census Region

Index	Compound Class	Compound Name (a)	CENSUS REGION			SOUTH			WEST SOUTH CENTRAL	
			CENSUS DIVISION			SOUTH ATLANTIC			WEST SOUTH CENTRAL	
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44
		D10-Anthracene - Internal Standard	.	..	..	..	...	...	..	..
1										
2	Saturated Ester	Dodecanoic acid, ethyl ester								
3		Hexanoic acid, mono(2-ethylhexyl) ester								
4		Alkyl ester [15-Methyl-heptadecanoate]					...	...
5										
6	Saturated Polyfunctional	Ethylhydrazone propanaldehyde								
7		9-Oxo-nonanoic acid, ethyl ester								
8	Alkene	1-Methyl-3-(1-methylethenyl)-cyclohexene								
9	Unsaturated Aldehyde	Trimethyl-3-cyclohexene-1-carboxaldehyde								
10		2-Butyl-2-octenal					...	..
11	Unsaturated Ketone	3-Methyl-3-Buten-2-one, dimer								
12		2,4,6-Cycloheptanone-1-one								
13		5-Undecen-4-one								
14		5-Ethyl-2-methyl-4-heptene-3-one								
15	Unsaturated Polyfunctional	Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]								
16		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]								
17		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]						..		
18		2-Methoxy-2-octen-4-one								
19	Alkyne	5,5-Dimethyl-3-heptyne								
20	Arene	C3-Alkyl benzene [1,3,5-trimethyl-benzene]								
21		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]								
22		C3-Alkyl benzene [1,2,4-trimethyl-benzene]								
23		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]								
24		Unidentified C11.H10 [1-Ethylidene-indene]								
25	Aromatic Aldehyde	Benzaldehyde					..			
26		Unidentified C10.H10.O [Alpha-ethylidene-benzeneacetaldehyde]					..			
27		Unidentified C10.H10.O [Alpha-ethylidene-benzeneacetaldehyde]						...		
28	Aromatic Ketone	1-Phenyl-ethanone								
29	Aromatic Amide	N-Methyl-1-naphthalenecarboxamide								
30	Aromatic Carboxylate Derivative	Benzenepropanoic acid, beta.,beta.-dimethyl-								
31		2-(acetylamino)-benzoic acid,methyl ester								
32		Benzenepropanoic acid, ethyl ester								..
33		Benzenepropanoic acid								
34	Phthalic Acid Derivative	Butyl decyl phthalate								
35		Isomer of diheptyl phthalate								
36		Isomer of diheptyl phthalate								
37		Butyl phthalate, ester with butyl glycolate								
38		Unidentified phthalate								
39	Phenol	Methyl phenol [2-Methyl-phenol]								
40		[1,1'-Biphenyl]-2-d							..	
41		2-Naphthalenol								
42	Aromatic Polyfunctional	1,3-Dimethoxy-benzene								
43		1-Phenyl-1,2-butanediol								
44		2-Ethoxy-benzaldehyde								
45		Unidentified C7.H5.O.N.S [Thiocyanic acid, 4-hydroxyphenyl ester]								
46	Drug	Methaqualone						..		
47		Unidentified barbiturate [5-Ethyl-1,3-dimethyl pyrimidinetrione]								
48		Alkyl substituted pyrimidinetrione [Mephobarbital]								
49		Alkyl substituted pyrimidinetrione [Pentobarbital]								..
50		Alkyl substituted pyrimidinetrione [Phenobarbital]								
51		Alkyl substituted pyrimidinetrione [Metharbital]								
52		Alkyl substituted pyrimidinetrione [Metharbital]								
53	Heterocyclic Compound	1,7-Naphthyridine								
54		Isomer of dimethyl-piperidine [1,4-Dimethyl-piperidine]								
55		3-Pyridinecarboxaldehyde, oxime								
56		4-Pyridinecarboxaldehyde								
57		Unidentified C8.H7.N [Indolizine]								
58		C2 Alkyl pyrazine [2,6-Dimethyl pyrazine]								
59		2-Methoxy-3-methyl-pyrazine								..
60		1,2-Benzisothiazole								
61		Unidentified C7.H11.N.S [2-Methyl-4-propyl-thiazole]								..
62		Alkyl thazole [4-Ethyl-5-methyl-thiazole]								

Table C-2 (concluded)

Index	Compound Class	Compound Name (a)	CENSUS REGION			SOUTH			WEST SOUTH CENTRAL						
			CENSUS DIVISION			SOUTH ATLANTIC			WEST SOUTH CENTRAL						
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+			
63		4-Propyl-thiazole													
64		1,3-Benzodioxole													
65		4,7-Dimethyl-3(2H)-benzofuranone													
66		Unidentified C11.H16.O2 [Tetrahydro-trimethyl-2(4H)-benzofuranone]													
67		5-(Butylimino)-2(5H)-furanone													
68		2H-1-Benzopyran-2-one													
69		1,3,5-Trimethyl-1H-pyrazole													
70		Isomer of thienyl-ethanone [1-(3-Thienyl)-ethanone]													
71		1-(4-Hydroxy-3-thienyl)-ethanone													
72		2,3,4-trimethyl thiophene													
73		2-Methyl-5-propyl-thiophene													
74		2-t-Butoxy-thiophene													
75	Steroid	Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]													
76		Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]													
77		Cholest-5-en-3-ol (3.beta.), propanoate													
78		Cholest-5-en-3-one													
79		Cholest-5-ene													
80		Isomer of cholest-en-ol [4-Methyl-cholest-8(14)-en-3-ol]													
81		Cholesta-3,5-dien-7-one													
82		Cholesta-4,6-dien-3-ol (3.Beta.), Benzoate													
83		Cholesta-5,7-dien-3-ol, (3.beta.)													
84		Isomer of cholestanol [Cholestanol]													
85		Methyl-cholestan-3-ol, (3.beta.,5.alpha.,6.beta.)													
86		3-(Acetoxy)-cholestan-6-one, (3.beta.,5.alpha.)													
87		Cholestane-3,5-diol, (3.beta.,5.alpha.)													
88		Cholestanol													
89		Cholestanol													
90	Halogenated Hydrocarbon	1-Chloro-4-(Methylsulfonyl)-benzene													
91		Isomer of fluoro-methyl-benzene [1-Fluoro-2-methyl-benzene]													
92		Carbonochlorodithioic acid, S-methyl ester													
93		1,1-Dichloro-ethene													
94		4-Chloro-2-(phenylmethyl)-phenol													
95	Organo-Silicon	1-Butynyl-trimethyl silane													
96		Trimethyl[(1-methyl-2-propynyl)oxy]-silane													

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table C-3. Compounds Identified in the 15/50% Florisil Semivolatile Organic Analysis Data Set - North Central Census Region

Index	Compound Class	Compound Name (a)	CENSUS REGION								
			CENSUS DIVISION			NORTH CENTRAL					
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+		
IS	Internal Standard	D10-Anthracene - Internal Standard									
1	Alkane	Unidentified C10.H20 [Diethyl cyclohexane]									
2	Saturated Ester	1,7,7-Trimethyl-bicyclo[2.2.1]heptan-2-ol, exo propanoate-									
3		Dodecanoic acid, ethyl ester									
4		Hexanedioic acid, mono(2-ethylhexyl) ester									
5		Alkyl ester [15-Methyl-heptadecanoate]									
6	Saturated Polyfunctional	Ethyldrazone propionaldehyde									
7		9-Oxo-nonanoic acid, ethyl ester									
8	Alkene	1-Methyl-3-(1-methylethenyl)-cyclohexene									
9	Unsaturated Aldehyde	Trimethyl-3-cyclohexene-1-carboxaldehyde									
10		2-Butyl-2-octenal									
11	Unsaturated Ketone	3-Methyl-3-Buten-2-one, dimer									
12		2,4,6-Cycloheptatriene-1-one									
13		5-Undecen-4-one									
14		5-Ethyl-2-methyl-4-heptene-3-one									
15	Unsaturated Polyfunctional	Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]									
16		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]									
17		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]									
18		2-Methoxy-2-octen-4-one									
19	Alkyne	5,5-Dimethyl-3-heptyne									
20	Arene	C3-Alkyl benzene [1,3,5-trimethyl-benzene]									
21		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]									
22		C3-Alkyl benzene [1,2,4-trimethyl-benzene]									
23		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]									
24		Unidentified C11.H10 [1-Ethylidene-indene]									
25	Aromatic Aldehyde	Benzaldehyde									
26		Unidentified C10.H10.O [Alpha-ethylidene-benzeneacetaldehyde]									
27		Unidentified C10.H10.O [Alpha-ethylidene-benzeneacetaldehyde]									
28	Aromatic Ketone	1-Phenyl-ethanone									
29	Aromatic Amide...	N-Methyl-1-naphthalenecarboxamide									
30	Aromatic Carboxylate Derivative	Benzenepropanoic acid, .beta.,.beta.-dimethyl-									
31		2-(acetylamino)-benzoic acid, methyl ester									
32		Benzenepropanoic acid, ethyl ester									
33		Benzenepropanoic acid									
34	Phthalic Acid Derivative	Butyl decyl phthalate									
35		Isomer of diheptyl phthalate									
36		Isomer of diheptyl phthalate									
37		Butyl phthalate, ester with butyl glycolate									
38		Unidentified phthalate									
39	Phenol	Methyl phenol [2-Methyl-phenol]									
40		[1,1'-Biphenyl]-2-ol									
41		2-Naphthalenol									
42	Aromatic Polyfunctional	1,3-Dimethoxy-benzene									
43		1-Phenyl-1,2-butanediol									
44		2-Ethoxy-benzaldehyde									
45		Unidentified C7.H5.O.N.S [Thiocyanic acid, 4-hydroxyphenyl ester]									
46	Drug	Methaqualone									
47		Unidentified barbiturate [5-Ethyl-1,3-dimethyl pyrimidinetrione]									
48		Alkyl substituted pyrimidinetrione [Mephobarbital]									
49		Alkyl substituted pyrimidinetrione [Pentobarbital]									
50		Alkyl substituted pyrimidinetrione [Phenobarbital]									
51		Alkyl substituted pyrimidinetrione [Metharbital]									
52		Alkyl substituted pyrimidinetrione [Metharbital]									
53	Heterocyclic Compound	1,7-Naphthyridine									
54		Isomer of dimethyl-piperidine [1,4-Dimethyl-piperidine]									
55		3-Pyridinecarboxaldehyde, oxime									
56		4-Pyridinecarboxaldehyde									
57		Unidentified C8.H7.N [Indolizine]									
58		C2 Alkyl pyrazine [2,6-Dimethyl pyrazine]									
59		2-Methoxy-3-methyl-pyrazine									

Table C-3 (concluded)

Index	Compound Class	Compound Name (a)	CENSUS REGION NORTH CENTRAL							
			CENSUS DIVISION EAST NORTH CENTRAL			WEST NORTH CENTRAL				
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	
60		1,2-Benzisothiazole								
61		Unidentified C7.H11.N.S [2-Methyl-4-propyl-thiazole]								
62		Alkyl thazole [4-Ethyl-5-methyl-thiazole]								
63		4-Propyl-thiazole								
64		1,3-Benzodioxole								
65		4,7-Dimethyl-3(2H)-benzofuranone								
66		Unidentified C11.H16.O2 [Tetrahydro-trimethyl-2(4H)-benzofuranone]								
67		5-(Butylimino)-2(5H)-furanone								
68		2H-1-Benzopyran-2-one								
69		1,3,5-Trimethyl-1H-pyrazole								
70		Isomer of thienyl-ethanone [1-(3-Thienyl)-ethanone]								
71		1-(4-Hydroxy-3-thienyl)-ethanone								
72		2,3,4-trimethyl thiophene								
73		2-Methyl-5-propyl-thiophene								
74		2-1-Butoxy-thiophene								
75	Steroid	Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]								
76		Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]								
77		Cholest-5-en-3-ol (3.beta.), propanoate								
78		Cholest-5-en-3-one								
79		Cholest-5-ene								
80		Isomer of cholest-en-ol [4-Methyl-cholest-8(14)-en-3-ol]								
81		Cholesta-3,5-dien-7-one								
82		Cholesta-4,6-dien-3-ol (3.Beta.), Benzoate								
83		Cholesta-5,7-dien-3-ol, (3.beta.)								
84		Isomer of cholestanol [Cholestanol]								
85		Methyl-cholestan-3-ol, (3.beta.,5.alpha.,6.beta.)								
86		3-(Acetoxy)-cholestan-6-one, (3.beta,5.alpha.)								
87		Cholestane-3,5-diol, (3.beta.,5.alpha.)								
88		Cholestanol								
89		Cholesterol								
90	Halogenated Hydrocarbon	1-Chloro-4-(Methylsulfonyl)-benzene								
91		Isomer of fluoro-methyl-benzene [1-Fluoro-2-methyl-benzene]								
92		Carbonochloridothioic acid, S-methyl ester								
93		1,1-Dichloro-ethene								
94		4-Chloro-2-(phenylmethyl)-phenol								
95	Organo-Silicon	1-Butynyl-trimethyl silane								
96		Trimethyl((1-methyl-2-propynyl)oxy)-silane								

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

Table C-4. Compounds Identified in the 15/50% Florisil Semivolatiles Organic Analysis Data Set - Northeast Census Region

Index	Compound Class	Compound Name (a)	CENSUS REGION			NORTHEAST		
			CENSUS DIVISION			NEW ENGLAND		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
IS.	Internal Standard	D10-Anthracene - Internal Standard	.	.	.	.	.	.
1	Alkane	Unidentified C10.H20 [Diethyl cyclohexane]	.	.	.	.	.	.
2	Saturated Ester	1,7,7-Trimethyl-bicyclo[2.2.1]heptan-2-ol, exo propanoate	.	.	.	.	.	.
3		Dodecanoic acid, ethyl ester	.	.	.	.	.	.
4		Hexanedioic acid, mono(2-ethylhexyl) ester	.	.	.	.	.	.
5		Alkyl ester [15-Methyl-heptadecanoate]	.	.	.	.	.	.
6		Saturated Polyfunctional	Ethylhydrazone propionaldehyde
7	9-Oxo-nonanoic acid, ethyl ester		.	.	.	.	.	.
8	Alkene	1-Methyl-3-(1-methylethenyl)-cyclohexene	.	.	.	.	.	.
9	Unsaturated Aldehyde	Trimethyl-3-cyclohexene-1-carboxaldehyde	.	.	.	.	.	.
10		2-Butyl-2-octenal	.	.	.	.	.	.
11	Unsaturated Ketone	3-Methyl-3-Buten-2-one, dimer	.	.	.	.	.	.
12		2,4,6-Cycloheptatriene-1-one	.	.	.	.	.	.
13		5-Undecen-4-one	.	.	.	.	.	.
14		5-Ethyl-2-methyl-4-heptene-3-one	.	.	.	.	.	.
15	Unsaturated Polyfunctional	Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]	.	.	.	.	.	.
16		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]	.	.	.	.	.	.
17		Substituted cyclopentenone [Butyl-methoxy-cyclopenten-1-one]	.	.	.	.	.	.
18		2-Methoxy-2-octen-4-one	.	.	.	.	.	.
19	Alkyne	5,5-Dimethyl-3-heptyne	.	.	.	.	.	.
20	Arene	C3-Alkyl benzene [1,3,5-trimethyl-benzene]	.	.	.	.	.	.
21		C3 Alkyl benzene [1,2,4-Trimethyl-benzene]	.	.	.	.	.	.
22		C3-Alkyl benzene [1,2,4-trimethyl-benzene]	.	.	.	.	.	.
23		C3 Alkyl benzene [1-Ethyl-3-methyl-benzene]	.	.	.	.	.	.
24		Unidentified C11.H10 [1-Ethylidene-indene]	.	.	.	.	.	.
25	Aromatic Aldehyde	Benzaldehyde	.	.	.	.	.	.
26		Unidentified C10.H10.O [Alpha.-ethylidene-benzeneacetaldehyde]	.	.	.	.	.	.
27		Unidentified C10.H10.O [Alpha.-ethylidene-benzeneacetaldehyde]	.	.	.	.	.	.
28	Aromatic Ketone	1-Phenyl-ethanone	.	.	.	.	.	.
29	Aromatic Amide	N-Methyl-1-naphthalenecarboxamide	.	.	.	.	.	.
30	Aromatic Carboxylate Derivative	Benzenepropanoic acid, beta.,beta.-dimethyl-	.	.	.	.	.	.
31		2-(acetylamino)-benzoic acid, methyl ester	.	.	.	.	.	.
32		Benzenepropanoic acid, ethyl ester	.	.	.	.	.	.
33		Benzenepropanoic acid	.	.	.	.	.	.
34	Phthalic Acid Derivative	Butyl decyl phthalate	.	.	.	.	.	.
35		Isomer of diheptyl phthalate	.	.	.	.	.	.
36		Isomer of diheptyl phthalate	.	.	.	.	.	.
37		Butyl phthalate, ester with butyl glycolate	.	.	.	.	.	.
38		Unidentified phthalate	.	.	.	.	.	.
39	Phenol	Methyl phenol [2-Methyl-phenol]	.	.	.	.	.	.
40		[1,1'-Biphenyl]-2-ol	.	.	.	.	.	.
41		2-Naphthalenol	.	.	.	.	.	.
42	Aromatic Polyfunctional	1,3-Dimethoxy-benzene	.	.	.	.	.	.
43		1-Phenyl-1,2-butanediol	.	.	.	.	.	.
44		2-Ethoxy-benzaldehyde	.	.	.	.	.	.
45		Unidentified C7.H5.O.N.S [Thiocyanic acid, 4-hydroxyphenyl ester]	.	.	.	.	.	.
46	Drug	Methaqualone	.	.	.	.	.	.
47		Unidentified barbiturate [5-Ethyl-1,3-dimethyl pyrimidinetrione]	.	.	.	.	.	.
48		Alkyl substituted pyrimidinetrione [Mephobarbital]	.	.	.	.	.	.
49		Alkyl substituted pyrimidinetrione [Pentobarbital]	.	.	.	.	.	.
50		Alkyl substituted pyrimidinetrione [Phenobarbital]	.	.	.	.	.	.
51		Alkyl substituted pyrimidinetrione [Metharbital]	.	.	.	.	.	.
52		Alkyl substituted pyrimidinetrione [Metharbital]	.	.	.	.	.	.
53	Heterocyclic Compound	1,7-Naphthyridine	.	.	.	.	.	.
54		Isomer of dimethyl-piperidine [1,4-Dimethyl-piperidine]	.	.	.	.	.	.
55		3-Pyridinecarboxaldehyde, oxime	.	.	.	.	.	.
56		4-Pyridinecarboxaldehyde	.	.	.	.	.	.
57		Unidentified C8.H7.N [Indolizine]	.	.	.	.	.	.
58		C2 Alkyl pyrazine [2,6-Dimethyl pyrazine]	.	.	.	.	.	.
59		2-Methoxy-3-methyl-pyrazine	.	.	.	.	.	.

Table C-4 (concluded)

Index	Compound Class	Compound Name (a)	CENSUS REGION			NORTHEAST				
			CENSUS DIVISION			MIDDLE ATLANTIC		NEW ENGLAND		
			AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
60		1,2-Benzisothiazole								
61		Unidentified C7.H11.N.S [2-Methyl-4-propyl-thiazole]								
62		Alkyl thazole [4-Ethyl-5-methyl-thiazole]								
63		4-Propyl-thiazole								
64		1,3-Benzodioxole								
65		4,7-Dimethyl-3(2H)-benzofuranone								
66		Unidentified C11.H16.O2 [Tetrahydro-trimethyl-2(4H)-benzofuranone]								
67		5-(Butylimino)-2(5H)-furanone								
68		2H-1-Benzopyran-2-one								
69		1,3,5-Trimethyl-1H-pyrazole								
70		Isomer of thienyl-ethanone [1-(3-Thienyl)-ethanone]								
71		1-(4-Hydroxy-3-thienyl)-ethanone								
72		2,3,4-trimethyl thiophene								
73		2-Methyl-5-propyl-thiophene								
74		2-t-Butoxy-thiophene								
75	Steroid	Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]								
76		Isomer of cholest-en-ol [Cholest-5-en-3-ol,acetate]								
77		Cholest-5-en-3-ol (3.beta.), propanoate								
78		Cholest-5-en-3-one								
79		Cholest-5-ene								
80		Isomer of cholest-en-ol [4-Methyl-cholest-8(14)-en-3-ol]								
81		Cholesta-3,5-dien-7-one								
82		Cholesta-4,6-dien-3-ol (3.Beta.), Benzoate								
83		Cholesta-5,7-dien-3-ol, (3.beta.)								
84		Isomer of cholestanol [Cholestanol]								
85		Methyl-cholestan-3-ol, (3.beta.,5.alpha.,6.beta.)								
86		3-(Acetoxy)-cholestan-6-one, (3.beta,5.alpha.)								
87		Cholestane-3,5-diol, (3.beta.,5.alpha.)								
88		Cholestanol								
89		Cholesterol								
90	Halogenated Hydrocarbon	1-Chloro-4-(Methylsulfonyl)-benzene								
91		Isomer of fluoro-methyl-benzene [1-Fluoro-2-methyl-benzene]								
92		Carbonochloridothioic acid, S-methyl ester								
93		1,1-Dichloro-ethene								
94		4-Chloro-2-(phenylmethyl)-phenol								
95	Organo-Silicon	1-Butynyl-trimethyl silane								
96		Trimethyl[(1-methyl-2-propynyl)oxy]-silane								

(a) Tentative compound identification is based on search vs. the NBS mass spectral library. Confirmation has not been achieved by comparing retention with an authentic standard. In cases where more than one reference compound successfully matched the unknown spectrum, a general descriptive name is reported and the best ranked NBS name is provided in brackets.

APPENDIX D

DOT MATRIX TABLE FOR UNIDENTIFIED HRGC/MS PEAKS IN THE VOLATILE ORGANIC
ANALYSIS DATA SET; UNIDENTIFIED VOLATILE ORGANIC COMPOUND RESPONSES VS.
CENSUS REGION, CENSUS DIVISION, AND AGE GROUP

Table D-1. Unidentified Peaks in the Volatile Organic Analysis
Data Set - West Census Region

Index Number	Average RRT	Total Number of Occurrences ^a	WEST						
			CENSUS DIVISION			CENSUS DIVISION			
			MOUNTAIN			PACIFIC			
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	
1.S.	1.000	46	.	.	.	.	.	.	.
1	0.481	46	.	.	.	.	.	.	.
2	3.216	46	.	.	.	.	.	.	.
3	3.114	45	.	.	.	.	.	.	.
4	2.659	44	.	.	.	.	.	.	.
5	4.213	43	.	.	.	.	.	.	.
6	0.370	41	.	.	.	.	.	.	.
7	2.398	41	.	.	.	.	.	.	.
8	0.405	34	.	.	.	.	.	.	.
9	2.890	30	.	.	.	.	.	.	.
10	4.353	28	.	.	.	.	.	.	.
11	3.862	24	.	.	.	.	.	.	.
12	0.286	23	.	.	.	.	.	.	.
13	3.322	21	.	.	.	.	.	.	.
14	3.314	18	.	.	.	.	.	.	.
15	2.771	14	.	.	.	.	.	.	.
16	2.689	13	.	.	.	.	.	.	.
17	1.997	12	.	.	.	.	.	.	.
18	3.384	12	.	.	.	.	.	.	.
19	3.873	12	.	.	.	.	.	.	.
20	2.666	11	.	.	.	.	.	.	.
21	4.390	11	.	.	.	.	.	.	.
22	2.570	10	.	.	.	.	.	.	.
23	3.962	9	.	.	.	.	.	.	.
24	4.142	9	.	.	.	.	.	.	.
25	0.335	8	.	.	.	.	.	.	.
26	2.369	8	.	.	.	.	.	.	.
27	2.619	8	.	.	.	.	.	.	.
28	3.364	8	.	.	.	.	.	.	.
29	3.812	8	.	.	.	.	.	.	.
30	1.488	7	.	.	.	.	.	.	.
31	2.572	7	.	.	.	.	.	.	.
32	3.177	7	.	.	.	.	.	.	.
33	4.159	7	.	.	.	.	.	.	.
34	2.053	6	.	.	.	.	.	.	.
35	4.388	6	.	.	.	.	.	.	.
36	4.573	6	.	.	.	.	.	.	.
37	0.802	5	.	.	.	.	.	.	.
38	1.744	5	.	.	.	.	.	.	.
39	2.495	5	.	.	.	.	.	.	.
40	2.867	5	.	.	.	.	.	.	.
41	2.906	5	.	.	.	.	.	.	.
42	3.308	5	.	.	.	.	.	.	.
43	3.501	5	.	.	.	.	.	.	.
44	4.319	5	.	.	.	.	.	.	.
45	0.277	4	.	.	.	.	.	.	.
46	0.408	4	.	.	.	.	.	.	.
47	1.719	4	.	.	.	.	.	.	.
48	3.064	4	.	.	.	.	.	.	.
49	3.159	4	.	.	.	.	.	.	.
50	3.513	4	.	.	.	.	.	.	.
51	3.881	4	.	.	.	.	.	.	.
52	3.908	4	.	.	.	.	.	.	.
53	4.317	4	.	.	.	.	.	.	.
54	0.381	3	.	.	.	.	.	.	.
55	1.141	3	.	.	.	.	.	.	.
56	2.721	3	.	.	.	.	.	.	.
57	3.482	3	.	.	.	.	.	.	.
58	4.146	3	.	.	.	.	.	.	.

Table D-1 (concluded)

CENSUS REGION			WEST					
CENSUS DIVISION			MOUNTAIN			PACIFIC		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index Number	Average RRT	Total Number of Occurrences ^a						
59	0.285	2						
60	0.573	2						
61	2.141	2						
62	2.892	2						
63	3.012	2						
64	3.551	2						
65	3.564	2						
66	3.700	2						
67	3.963	2						
68	4.113	2						
69	0.313	1						
70	1.036	1						
71	1.511	1						
72	1.672	1						
73	2.028	1						
74	2.239	1						
75	2.262	1						
76	2.271	1						
77	2.301	1						
78	2.407	1						
79	2.671	1						
80	2.891	1						
81	2.907	1						
82	2.988	1						
83	3.073	1						
84	3.100	1						
85	3.175	1						
86	3.314	1						
87	3.371	1						
88	3.453	1						
89	3.461	1						
90	3.494	1						
91	3.650	1						
92	3.782	1						
93	3.829	1						
94	3.975	1						
95	3.993	1						
96	4.192	1						
97	4.635	1						
98	4.812	1						
99	5.004	1						

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

Table D-2. Unidentified Peaks in the Volatile Organic Analysis Data Set - South Census Region

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index Number	Average RRT	Total Number of Occurrences ^a									
1.S.	1.000	46	.	.	.	.	.	.	.	.	.
1	0.481	46	.	.	.	.	.	.	.	.	.
2	3.216	46	.	.	.	.	.	.	.	.	.
3	3.114	45	.	.	.	.	.	.	.	.	.
4	2.659	44	.	.	.	.	.	.	.	.	.
5	4.213	43	.	.	.	.	.	.	.	.	.
6	0.370	41	.	.	.	.	.	.	.	.	.
7	2.398	41	.	.	.	.	.	.	.	.	.
8	0.405	34	.	.	.	.	.	.	.	.	.
9	2.890	30	.	.	.	.	.	.	.	.	.
10	4.353	28	.	.	.	.	.	.	.	.	.
11	3.862	24	.	.	.	.	.	.	.	.	.
12	0.286	23	.	.	.	.	.	.	.	.	.
13	3.322	21	.	.	.	.	.	.	.	.	.
14	3.314	18	.	.	.	.	.	.	.	.	.
15	2.771	14	.	.	.	.	.	.	.	.	.
16	2.689	13	.	.	.	.	.	.	.	.	.
17	1.997	12	.	.	.	.	.	.	.	.	.
18	3.384	12	.	.	.	.	.	.	.	.	.
19	3.873	12	.	.	.	.	.	.	.	.	.
20	2.666	11	.	.	.	.	.	.	.	.	.
21	4.390	11	.	.	.	.	.	.	.	.	.
22	2.570	10	.	.	.	.	.	.	.	.	.
23	3.962	9	.	.	.	.	.	.	.	.	.
24	4.142	9	.	.	.	.	.	.	.	.	.
25	0.335	8	.	.	.	.	.	.	.	.	.
26	2.369	8	.	.	.	.	.	.	.	.	.
27	2.619	8	.	.	.	.	.	.	.	.	.
28	3.364	8	.	.	.	.	.	.	.	.	.
29	3.812	8	.	.	.	.	.	.	.	.	.
30	1.488	7	.	.	.	.	.	.	.	.	.
31	2.572	7	.	.	.	.	.	.	.	.	.
32	3.177	7	.	.	.	.	.	.	.	.	.
33	4.159	7	.	.	.	.	.	.	.	.	.
34	2.053	6	.	.	.	.	.	.	.	.	.
35	4.388	6	.	.	.	.	.	.	.	.	.
36	4.573	6	.	.	.	.	.	.	.	.	.
37	0.802	5	.	.	.	.	.	.	.	.	.
38	1.744	5	.	.	.	.	.	.	.	.	.
39	2.495	5	.	.	.	.	.	.	.	.	.
40	2.867	5	.	.	.	.	.	.	.	.	.
41	2.906	5	.	.	.	.	.	.	.	.	.
42	3.308	5	.	.	.	.	.	.	.	.	.
43	3.501	5	.	.	.	.	.	.	.	.	.
44	4.319	5	.	.	.	.	.	.	.	.	.
45	0.277	4	.	.	.	.	.	.	.	.	.
46	0.408	4	.	.	.	.	.	.	.	.	.
47	1.719	4	.	.	.	.	.	.	.	.	.
48	3.064	4	.	.	.	.	.	.	.	.	.
49	3.159	4	.	.	.	.	.	.	.	.	.
50	3.513	4	.	.	.	.	.	.	.	.	.
51	3.881	4	.	.	.	.	.	.	.	.	.
52	3.908	4	.	.	.	.	.	.	.	.	.
53	4.317	4	.	.	.	.	.	.	.	.	.
54	0.381	3	.	.	.	.	.	.	.	.	.
55	1.141	3	.	.	.	.	.	.	.	.	.
56	2.721	3	.	.	.	.	.	.	.	.	.
57	3.482	3	.	.	.	.	.	.	.	.	.
58	4.146	3	.	.	.	.	.	.	.	.	.

Table D-2 (concluded)

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index Number	Average RRT	Total Number of Occurrences ^a									
59	0.285	2									
60	0.573	2									
61	2.141	2									
62	2.892	2									
63	3.012	2									
64	3.551	2									
65	3.564	2									
66	3.700	2									
67	3.963	2									
68	4.113	2									
69	0.313	1									
70	1.036	1									
71	1.511	1									
72	1.672	1									
73	2.028	1									
74	2.239	1									
75	2.262	1									
76	2.271	1									
77	2.301	1									
78	2.407	1									
79	2.671	1									
80	2.891	1									
81	2.907	1									
82	2.988	1									
83	3.073	1									
84	3.100	1									
85	3.175	1									
86	3.314	1									
87	3.371	1									
88	3.453	1									
89	3.461	1									
90	3.494	1									
91	3.650	1									
92	3.782	1									
93	3.829	1									
94	3.975	1									
95	3.993	1									
96	4.192	1									
97	4.635	1									
98	4.812	1									
99	5.004	1									

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

Table D-3. Unidentified Peaks in the Volatile Organic Analysis Data Set - North Central Census Region

Index Number	Average RRT	Total Number of Occurrences \bar{a}	CENSUS REGION NORTH CENTRAL					
			CENSUS DIVISION EAST NORTH CENTRAL			WEST NORTH CENTRAL		
			AGE GROUP 0-14	15-44	45+	0-14	15-44	45+
I.S.	1.000	46	.	.	.	.	.	.
1	0.481	46	.	.	.	.	.	.
2	3.216	46	.	.	.	.	.	.
3	3.114	45	.	.	.	.	.	.
4	2.659	44	.	.	.	.	.	.
5	4.213	43	.	.	.	.	.	.
6	0.370	41	.	.	.	.	.	.
7	2.398	41	.	.	.	.	.	.
8	0.405	34	.	.	.	.	.	.
9	2.890	30	.	.	.	.	.	.
10	4.353	28	.	.	.	.	.	.
11	3.862	24	.	.	.	.	.	.
12	0.286	23	.	.	.	.	.	.
13	3.322	21	.	.	.	.	.	.
14	3.314	18	.	.	.	.	.	.
15	2.771	14	.	.	.	.	.	.
16	2.689	13	.	.	.	.	.	.
17	1.997	12	.	.	.	.	.	.
18	3.384	12	.	.	.	.	.	.
19	3.873	12	.	.	.	.	.	.
20	2.666	11	.	.	.	.	.	.
21	4.390	11	.	.	.	.	.	.
22	2.570	10	.	.	.	.	.	.
23	3.962	9	.	.	.	.	.	.
24	4.142	9	.	.	.	.	.	.
25	0.335	8	.	.	.	.	.	.
26	2.369	8	.	.	.	.	.	.
27	2.619	8	.	.	.	.	.	.
28	3.364	8	.	.	.	.	.	.
29	3.812	8	.	.	.	.	.	.
30	1.488	7	.	.	.	.	.	.
31	2.572	7	.	.	.	.	.	.
32	3.177	7	.	.	.	.	.	.
33	4.159	7	.	.	.	.	.	.
34	2.053	6	.	.	.	.	.	.
35	4.388	6	.	.	.	.	.	.
36	4.573	6	.	.	.	.	.	.
37	0.802	5	.	.	.	.	.	.
38	1.744	5	.	.	.	.	.	.
39	2.495	5	.	.	.	.	.	.
40	2.867	5	.	.	.	.	.	.
41	2.906	5	.	.	.	.	.	.
42	3.308	5	.	.	.	.	.	.
43	3.501	5	.	.	.	.	.	.
44	4.319	5	.	.	.	.	.	.
45	0.277	4	.	.	.	.	.	.
46	0.408	4	.	.	.	.	.	.
47	1.719	4	.	.	.	.	.	.
48	3.064	4	.	.	.	.	.	.
49	3.159	4	.	.	.	.	.	.
50	3.513	4	.	.	.	.	.	.
51	3.881	4	.	.	.	.	.	.
52	3.908	4	.	.	.	.	.	.
53	4.317	4	.	.	.	.	.	.
54	0.381	3	.	.	.	.	.	.
55	1.141	3	.	.	.	.	.	.
56	2.721	3	.	.	.	.	.	.
57	3.482	3	.	.	.	.	.	.
58	4.146	3	.	.	.	.	.	.

Table D-3 (concluded)

Index Number	Average RRT	Total Number of Occurrences ^a	CENSUS REGION					
			NORTH CENTRAL					
			EAST NORTH CENTRAL			WEST NORTH CENTRAL		
AGE GROUP	0-14	15-44	45+	0-14	15-44	45+		
59	0.285	2						
60	0.573	2						
61	2.141	2						
62	2.892	2						
63	3.012	2						
64	3.551	2						
65	3.564	2						
66	3.700	2						
67	3.963	2						
68	4.113	2						
69	0.313	1						
70	1.036	1						
71	1.511	1						
72	1.672	1						
73	2.028	1						
74	2.239	1						
75	2.262	1						
76	2.271	1						
77	2.301	1						
78	2.407	1						
79	2.671	1						
80	2.891	1						
81	2.907	1						
82	2.988	1						
83	3.073	1						
84	3.100	1						
85	3.175	1						
86	3.314	1						
87	3.371	1						
88	3.453	1						
89	3.461	1						
90	3.494	1						
91	3.650	1						
92	3.782	1						
93	3.829	1						
94	3.975	1						
95	3.993	1						
96	4.192	1						
97	4.635	1						
98	4.812	1						
99	5.004	1						

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

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Table D-4. Unidentified Peaks in the Volatile Organic Analysis Data Set - Northeast Census Region

Index Number	Average RRT	Total Number of Occurrences ^a	CENSUS REGION					
			CENSUS DIVISION			NORTHEAST		
			MIDDLE ATLANTIC			NEW ENGLAND		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
1.S.	1.000	46	.	.	.	.	.	.
1	0.481	46	.	.	.	.	.	.
2	3.216	46	.	.	.	.	.	.
3	3.114	45	.	.	.	.	.	.
4	2.659	44	.	.	.	.	.	.
5	4.213	43	.	.	.	.	.	.
6	0.370	41	.	.	.	.	.	.
7	2.398	41	.	.	.	.	.	.
8	0.405	34	.	.	.	.	.	.
9	2.890	30	.	.	.	.	.	.
10	4.353	28	.	.	.	.	.	.
11	3.862	24	.	.	.	.	.	.
12	0.286	23	.	.	.	.	.	.
13	3.322	21	.	.	.	.	.	.
14	3.314	18	.	.	.	.	.	.
15	2.771	14	.	.	.	.	.	.
16	2.689	13	.	.	.	.	.	.
17	1.997	12	.	.	.	.	.	.
18	3.384	12	.	.	.	.	.	.
19	3.873	12	.	.	.	.	.	.
20	2.666	11	.	.	.	.	.	.
21	4.390	11	.	.	.	.	.	.
22	2.570	10	.	.	.	.	.	.
23	3.962	9	.	.	.	.	.	.
24	4.142	9	.	.	.	.	.	.
25	0.335	8	.	.	.	.	.	.
26	2.369	8	.	.	.	.	.	.
27	2.619	8	.	.	.	.	.	.
28	3.364	8	.	.	.	.	.	.
29	3.812	8	.	.	.	.	.	.
30	1.488	7	.	.	.	.	.	.
31	2.572	7	.	.	.	.	.	.
32	3.177	7	.	.	.	.	.	.
33	4.159	7	.	.	.	.	.	.
34	2.053	6	.	.	.	.	.	.
35	4.388	6	.	.	.	.	.	.
36	4.573	6	.	.	.	.	.	.
37	0.802	5	.	.	.	.	.	.
38	1.744	5	.	.	.	.	.	.
39	2.495	5	.	.	.	.	.	.
40	2.867	5	.	.	.	.	.	.
41	2.906	5	.	.	.	.	.	.
42	3.308	5	.	.	.	.	.	.
43	3.501	5	.	.	.	.	.	.
44	4.319	5	.	.	.	.	.	.
45	0.277	4	.	.	.	.	.	.
46	0.408	4	.	.	.	.	.	.
47	1.719	4	.	.	.	.	.	.
48	3.064	4	.	.	.	.	.	.
49	3.159	4	.	.	.	.	.	.
50	3.513	4	.	.	.	.	.	.
51	3.881	4	.	.	.	.	.	.
52	3.908	4	.	.	.	.	.	.
53	4.317	4	.	.	.	.	.	.
54	0.381	3	.	.	.	.	.	.
55	1.141	3	.	.	.	.	.	.
56	2.721	3	.	.	.	.	.	.
57	3.482	3	.	.	.	.	.	.
58	4.146	3	.	.	.	.	.	.

Table D-4 (concluded)

Index Number	Average RRT	Total Number of Occurrences ^a	CENSUS REGION					
			MIDDLE ATLANTIC			NEW ENGLAND		
			0-14	15-44	45+	0-14	15-44	45+
59	0.285	2						
60	0.573	2						
61	2.141	2						
62	2.892	2						
63	3.012	2						
64	3.551	2						
65	3.564	2						
66	3.700	2						
67	3.963	2						
68	4.113	2						
69	0.313	1						
70	1.036	1						
71	1.511	1						
72	1.672	1						
73	2.028	1						
74	2.239	1						
75	2.262	1						
76	2.271	1						
77	2.301	1						
78	2.407	1						
79	2.671	1						
80	2.891	1						
81	2.907	1						
82	2.988	1						
83	3.073	1						
84	3.100	1						
85	3.175	1						
86	3.314	1						
87	3.371	1						
88	3.453	1						
89	3.461	1						
90	3.494	1						
91	3.650	1						
92	3.782	1						
93	3.829	1						
94	3.975	1						
95	3.993	1						
96	4.192	1						
97	4.635	1						
98	4.812	1						
99	5.004	1						

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

APPENDIX E

DOT MATRIX TABLE FOR UNIDENTIFIED HRGC/MS PEAKS IN THE 6% FLORISIL
SEMIVOLATILE ORGANIC ANALYSIS DATA SET; UNIDENTIFIED SEMIVOLATILE
ORGANIC COMPOUND RESPONSES VS. CENSUS REGION,
CENSUS DIVISION, AND AGE GROUP

Table E-1. Unidentified Peaks in the 6% Florisil Semivolatile Organic Analysis Data Set - West Census Region

Index	Average RRT	Number of Occurrences In Samples ^a	CENSUS REGION					
			CENSUS DIVISION			WEST		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
I.S.	1.000	44	.	.	.	.	.	.
1	0.924	42	.	.	.	.	.	.
2	1.600	42	.	.	.	.	.	.
3	0.759	38	.	.	.	.	.	.
4	1.027	38	.	.	.	.	.	.
5	1.023	35	.	.	.	.	.	.
6	1.117	34	.	.	.	.	.	.
7	1.706	34	.	.	.	.	.	.
8	1.129	32	.	.	.	.	.	.
9	0.879	31	.	.	.	.	.	.
10	0.702	30	.	.	.	.	.	.
11	0.919	30	.	.	.	.	.	.
12	0.990	29	.	.	.	.	.	.
13	0.838	28	.	.	.	.	.	.
14	0.912	26	.	.	.	.	.	.
15	1.481	26	.	.	.	.	.	.
16	1.760	25	.	.	.	.	.	.
17	0.985	24	.	.	.	.	.	.
18	1.059	24	.	.	.	.	.	.
19	0.673	23	.	.	.	.	.	.
20	0.993	23	.	.	.	.	.	.
21	0.982	22	.	.	.	.	.	.
22	1.533	22	.	.	.	.	.	.
23	1.063	21	.	.	.	.	.	.
24	1.199	21	.	.	.	.	.	.
25	1.374	21	.	.	.	.	.	.
26	0.726	19	.	.	.	.	.	.
27	1.741	19	.	.	.	.	.	.
28	0.952	17	.	.	.	.	.	.
29	1.237	17	.	.	.	.	.	.
30	1.629	17	.	.	.	.	.	.
31	1.586	16	.	.	.	.	.	.
32	0.493	15	.	.	.	.	.	.
33	1.002	15	.	.	.	.	.	.
34	1.065	15	.	.	.	.	.	.
35	0.839	14	.	.	.	.	.	.
36	1.070	14	.	.	.	.	.	.
37	1.728	14	.	.	.	.	.	.
38	0.574	13	.	.	.	.	.	.
39	0.665	13	.	.	.	.	.	.
40	1.178	13	.	.	.	.	.	.
41	1.280	13	.	.	.	.	.	.
42	1.297	13	.	.	.	.	.	.
43	0.190	12	.	.	.	.	.	.
44	0.666	12	.	.	.	.	.	.
45	0.310	11	.	.	.	.	.	.
46	0.603	11	.	.	.	.	.	.
47	1.082	11	.	.	.	.	.	.
48	1.131	11	.	.	.	.	.	.
49	1.146	11	.	.	.	.	.	.
50	0.411	10	.	.	.	.	.	.
51	0.780	10	.	.	.	.	.	.
52	1.009	10	.	.	.	.	.	.
53	1.160	10	.	.	.	.	.	.
54	1.219	10	.	.	.	.	.	.
55	1.224	9	.	.	.	.	.	.
56	0.220	8	.	.	.	.	.	.
57	0.670	8	.	.	.	.	.	.

Table E-1 (continued)

CENSUS REGION			WEST					
CENSUS DIVISION			MOUNTAIN			PACIFIC		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples \bar{a}						
58	0.959	8						
59	1.178	8						
60	1.197	8						
61	1.626	8						
62	1.638	8						
63	0.360	7						
64	0.674	7						
65	0.897	7						
66	0.932	7						
67	1.051	7						
68	1.094	7						
69	1.427	7						
70	1.475	7						
71	1.681	7						
72	1.773	7						
73	0.337	6						
74	0.662	6						
75	0.880	6						
76	1.177	6						
77	1.253	6						
78	1.681	6						
79	0.278	5						
80	0.472	5						
81	0.736	5						
82	0.991	5						
83	1.057	5						
84	1.069	5						
85	1.073	5						
86	1.085	5						
87	1.195	5						
88	1.407	5						
89	0.399	4						
90	0.661	4						
91	0.730	4						
92	0.965	4						
93	1.068	4						
94	1.144	4						
95	1.195	4						
96	1.222	4						
97	1.326	4						
98	1.355	4						
99	1.389	4						
100	1.411	4						
101	1.538	4						
102	0.316	3						
103	0.608	3						
104	0.662	3						
105	0.747	3						
106	0.754	3						
107	0.855	3						
108	0.893	3						
109	0.918	3						
110	0.967	3						
111	1.019	3						
112	1.025	3						
113	1.041	3						
114	1.045	3						
115	1.050	3						

Table E-1 (continued)

Index	Average RRT	Number of Occurrences In Samples \bar{c}	CENSUS REGION WEST					
			CENSUS DIVISION MOUNTAIN			PACIFIC		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
116	1.055	3						
117	1.076	3						
118	1.107	3						
119	1.109	3						
120	1.186	3						
121	1.244	3						
122	1.251	3						
123	1.414	3						
124	1.457	3						
125	1.585	3						
126	0.325	2						
127	0.356	2						
128	0.747	2						
129	0.754	2						
130	0.817	2						
131	0.823	2						
132	0.855	2						
133	0.896	2						
134	0.898	2						
135	0.905	2						
136	0.933	2						
137	0.976	2						
138	0.982	2						
139	0.985	2						
140	1.020	2						
141	1.038	2						
142	1.053	2						
143	1.080	2						
144	1.106	2						
145	1.120	2						
146	1.124	2						
147	1.143	2						
148	1.152	2						
149	1.158	2						
150	1.179	2						
151	1.221	2						
152	1.252	2						
153	1.336	2						
154	1.345	2						
155	1.360	2						
156	1.382	2						
157	1.542	2						
158	1.577	2						
159	1.589	2						
160	1.600	2						
161	1.680	2						
162	1.727	2						
163	1.731	2						
164	0.229	1						
165	0.255	1						
166	0.266	1						
167	0.269	1						
168	0.279	1						
169	0.293	1						
170	0.300	1						
171	0.329	1						
172	0.357	1						
173	0.406	1						

Table E-1 (continued)

Index	Average RRT	Number of Occurrences In Samples ^a	CENSUS REGION WEST					
			CENSUS DIVISION MOUNTAIN			PACIFIC		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
174	0.406	1						
175	0.463	1						
176	0.499	1						
177	0.539	1						
178	0.575	1						
179	0.672	1						
180	0.676	1						
181	0.708	1						
182	0.724	1						
183	0.732	1						
184	0.732	1						
185	0.734	1						
186	0.742	1						
187	0.743	1						
188	0.747	1						
189	0.749	1						
190	0.799	1						
191	0.829	1						
192	0.830	1						
193	0.855	1						
194	0.892	1						
195	0.911	1						
196	0.914	1						
197	0.973	1						
198	1.011	1						
199	1.018	1						
200	1.035	1						
201	1.051	1						
202	1.053	1						
203	1.060	1						
204	1.064	1						
205	1.075	1						
206	1.078	1						
207	1.084	1						
208	1.107	1						
209	1.117	1						
210	1.117	1						
211	1.118	1						
212	1.121	1						
213	1.122	1						
214	1.134	1						
215	1.134	1						
216	1.138	1						
217	1.140	1						
218	1.140	1						
219	1.152	1						
220	1.161	1						
221	1.170	1						
222	1.189	1						
223	1.208	1						
224	1.217	1						
225	1.226	1						
226	1.262	1						
227	1.288	1						
228	1.289	1						
229	1.304	1						
230	1.348	1						
231	1.349	1						

Table E-1 (concluded)

CENSUS REGION			WEST					
CENSUS DIVISION			MOUNTAIN			PACIFIC		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences in Samples ^a						
232	1.349	1						
233	1.350	1						
234	1.356	1						
235	1.375	1						
236	1.379	1						
237	1.394	1						
238	1.407	1						
239	1.534	1						
240	1.588	1						
241	1.590	1						
242	1.596	1						
243	1.624	1						
244	1.634	1						
245	1.646	1						
246	1.659	1						
247	1.676	1						
248	1.678	1						
249	1.701	1						
250	1.709	1						
251	1.718	1						
252	1.721	1						
253	1.731	1						
254	1.734	1						
255	1.734	1						
256	1.740	1						
257	1.804	1						
258	1.889	1						

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

Table E-2. Unidentified Peaks in the 6% Florisil Semivolatile Organic Analysis Data Set - South Census Region

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples \bar{a}									
1S.	1.000	44	.	.	.	.	.	.	.	.	.
1	0.924	42	.	.	.	.	.	.	.	.	.
2	1.600	42	.	.	.	.	.	.	.	.	.
3	0.759	38	.	.	.	.	.	.	.	.	.
4	1.027	38	.	.	.	.	.	.	.	.	.
5	1.023	35	.	.	.	.	.	.	.	.	.
6	1.117	34	.	.	.	.	.	.	.	.	.
7	1.706	34	.	.	.	.	.	.	.	.	.
8	1.129	32	.	.	.	.	.	.	.	.	.
9	0.879	31	.	.	.	.	.	.	.	.	.
10	0.702	30	.	.	.	.	.	.	.	.	.
11	0.919	30	.	.	.	.	.	.	.	.	.
12	0.990	29	.	.	.	.	.	.	.	.	.
13	0.838	28	.	.	.	.	.	.	.	.	.
14	0.912	26	.	.	.	.	.	.	.	.	.
15	1.481	26	.	.	.	.	.	.	.	.	.
16	1.760	25	.	.	.	.	.	.	.	.	.
17	0.985	24	.	.	.	.	.	.	.	.	.
18	1.059	24	.	.	.	.	.	.	.	.	.
19	0.673	23	.	.	.	.	.	.	.	.	.
20	0.993	23	.	.	.	.	.	.	.	.	.
21	0.982	22	.	.	.	.	.	.	.	.	.
22	1.533	22	.	.	.	.	.	.	.	.	.
23	1.063	21	.	.	.	.	.	.	.	.	.
24	1.199	21	.	.	.	.	.	.	.	.	.
25	1.374	21	.	.	.	.	.	.	.	.	.
26	0.726	19	.	.	.	.	.	.	.	.	.
27	1.741	19	.	.	.	.	.	.	.	.	.
28	0.952	17	.	.	.	.	.	.	.	.	.
29	1.237	17	.	.	.	.	.	.	.	.	.
30	1.629	17	.	.	.	.	.	.	.	.	.
31	1.586	16	.	.	.	.	.	.	.	.	.
32	0.493	15	.	.	.	.	.	.	.	.	.
33	1.002	15	.	.	.	.	.	.	.	.	.
34	1.065	15	.	.	.	.	.	.	.	.	.
35	0.839	14	.	.	.	.	.	.	.	.	.
36	1.070	14	.	.	.	.	.	.	.	.	.
37	1.728	14	.	.	.	.	.	.	.	.	.
38	0.574	13	.	.	.	.	.	.	.	.	.
39	0.665	13	.	.	.	.	.	.	.	.	.
40	1.178	13	.	.	.	.	.	.	.	.	.
41	1.280	13	.	.	.	.	.	.	.	.	.
42	1.297	13	.	.	.	.	.	.	.	.	.
43	0.190	12	.	.	.	.	.	.	.	.	.
44	0.666	12	.	.	.	.	.	.	.	.	.
45	0.310	11	.	.	.	.	.	.	.	.	.
46	0.603	11	.	.	.	.	.	.	.	.	.
47	1.082	11	.	.	.	.	.	.	.	.	.
48	1.131	11	.	.	.	.	.	.	.	.	.
49	1.146	11	.	.	.	.	.	.	.	.	.
50	0.411	10	.	.	.	.	.	.	.	.	.
51	0.780	10	.	.	.	.	.	.	.	.	.
52	1.009	10	.	.	.	.	.	.	.	.	.
53	1.160	10	.	.	.	.	.	.	.	.	.
54	1.218	10	.	.	.	.	.	.	.	.	.
55	1.224	9	.	.	.	.	.	.	.	.	.
56	0.220	8	.	.	.	.	.	.	.	.	.
57	0.670	8	.	.	.	.	.	.	.	.	.

Table E-2 (continued)

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples \bar{x}									
58	0.959	8			.	.	.	.
59	1.178	8				.	.	.		.	.
60	1.197	8				.	.	.	.	.	.
61	1.626	8			.				.	.	.
62	1.638	8			.			.	.	.	.
63	0.360	7						.	.	.	.
64	0.674	7						.	.	.	.
65	0.897	7				.	.	.	.	.	.
66	0.932	7				.	.	.	.	.	.
67	1.051	7				.	.	.	.	.	.
68	1.094	7	.	.	.	.	.	.	.	.	.
69	1.427	7	.	.	.	.	.	.	.	.	.
70	1.475	7	.	.	.	.	.	.	.	.	.
71	1.681	7			.			.	.	.	.
72	1.773	7			.			.	.	.	.
73	0.337	6				.	.	.	.	.	.
74	0.662	6				.	.	.	.	.	.
75	0.880	6				.	.	.	.	.	.
76	1.177	6			.			.	.	.	.
77	1.253	6	.	.	.	.	.	.	.	.	.
78	1.681	6	.	.	.	.	.	.	.	.	.
79	0.278	5				.	.	.	.	.	.
80	0.472	5				.	.	.	.	.	.
81	0.736	5			.			.	.	.	.
82	0.991	5				.	.	.	.	.	.
83	1.057	5				.	.	.	.	.	.
84	1.069	5				.	.	.	.	.	.
85	1.073	5				.	.	.	.	.	.
86	1.085	5			.			.	.	.	.
87	1.195	5			.			.	.	.	.
88	1.407	5			.			.	.	.	.
89	0.399	4			.			.	.	.	.
90	0.661	4			.			.	.	.	.
91	0.730	4			.			.	.	.	.
92	0.965	4			.			.	.	.	.
93	1.068	4			.			.	.	.	.
94	1.144	4			.			.	.	.	.
95	1.195	4			.			.	.	.	.
96	1.222	4			.			.	.	.	.
97	1.326	4			.			.	.	.	.
98	1.355	4			.			.	.	.	.
99	1.389	4			.			.	.	.	.
100	1.411	4			.			.	.	.	.
101	1.538	4			.			.	.	.	.
102	0.316	3				.	.	.	.	.	.
103	0.608	3				.	.	.	.	.	.
104	0.662	3				.	.	.	.	.	.
105	0.747	3				.	.	.	.	.	.
106	0.754	3				.	.	.	.	.	.
107	0.855	3				.	.	.	.	.	.
108	0.893	3				.	.	.	.	.	.
109	0.918	3				.	.	.	.	.	.
110	0.967	3				.	.	.	.	.	.
111	1.019	3				.	.	.	.	.	.
112	1.025	3		.	.	.	.	.	.	.	.
113	1.041	3		.	.	.	.	.	.	.	.
114	1.045	3		.	.	.	.	.	.	.	.
115	1.050	3		.	.	.	.	.	.	.	.

Table E-2 (continued)

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences in Samples ^a									
116	1.055	3									
117	1.076	3									
118	1.107	3									
119	1.109	3									
120	1.186	3									
121	1.244	3									
122	1.251	3									
123	1.414	3									
124	1.457	3									
125	1.585	3									
126	0.325	2									
127	0.356	2									
128	0.747	2									
129	0.754	2									
130	0.817	2									
131	0.823	2									
132	0.855	2									
133	0.896	2									
134	0.898	2									
135	0.905	2									
136	0.933	2									
137	0.976	2									
138	0.982	2									
139	0.985	2									
140	1.020	2									
141	1.038	2									
142	1.053	2									
143	1.080	2									
144	1.106	2									
145	1.120	2									
146	1.124	2									
147	1.143	2									
148	1.152	2									
149	1.158	2									
150	1.179	2									
151	1.221	2									
152	1.252	2									
153	1.336	2									
154	1.345	2									
155	1.360	2									
156	1.382	2									
157	1.542	2									
158	1.577	2									
159	1.589	2									
160	1.600	2									
161	1.680	2									
162	1.727	2									
163	1.731	2									
164	0.229	1									
165	0.255	1									
166	0.266	1									
167	0.269	1									
168	0.279	1									
169	0.293	1									
170	0.300	1									
171	0.329	1									
172	0.357	1									
173	0.406	1									

Table E-2 (continued)

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RFT	Number of Occurrences In Samples \bar{a}									
174	0.406	1									
175	0.463	1									
176	0.499	1									
177	0.539	1									
178	0.575	1									
179	0.672	1									
180	0.676	1									
181	0.708	1									
182	0.724	1									
183	0.732	1									
184	0.732	1									
185	0.734	1									
186	0.742	1									
187	0.743	1									
188	0.747	1									
189	0.749	1									
190	0.799	1									
191	0.829	1									
192	0.830	1									
193	0.855	1									
194	0.892	1									
195	0.911	1									
196	0.914	1									
197	0.973	1									
198	1.011	1									
199	1.018	1									
200	1.035	1									
201	1.051	1									
202	1.053	1									
203	1.060	1									
204	1.064	1									
205	1.075	1									
206	1.078	1									
207	1.084	1									
208	1.107	1									
209	1.117	1									
210	1.117	1									
211	1.118	1									
212	1.121	1									
213	1.122	1									
214	1.134	1									
215	1.134	1									
216	1.138	1									
217	1.140	1									
218	1.140	1									
219	1.152	1									
220	1.161	1									
221	1.170	1									
222	1.189	1									
223	1.208	1									
224	1.217	1									
225	1.226	1									
226	1.262	1									
227	1.288	1									
228	1.289	1									
229	1.304	1									
230	1.348	1									
231	1.349	1									

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Table E-2 (concluded)

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a									
232	1.349	1									
233	1.350	1									
234	1.356	1									
235	1.375	1									
236	1.379	1									
237	1.394	1									
238	1.407	1									
239	1.534	1									
240	1.588	1									
241	1.590	1									
242	1.596	1									
243	1.624	1									
244	1.634	1									
245	1.646	1									
246	1.659	1									
247	1.676	1									
248	1.678	1									
249	1.701	1									
250	1.709	1									
251	1.718	1									
252	1.721	1									
253	1.731	1									
254	1.734	1									
255	1.734	1									
256	1.740	1									
257	1.804	1									
258	1.889	1									

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

Table E-3. Unidentified Peaks in the 6% Florisil Semivolatile Organic Analysis Data Set - North Central Census Region

CENSUS REGION			NORTH CENTRAL					
CENSUS DIVISION			EAST NORTH CENTRAL			WEST NORTH CENTRAL		
			AGE GROUP					
			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples \bar{n}						
I.S.	1.000	44	.	.	.	.	.	.
1	0.924	42	.	.	.	.	.	.
2	1.600	42	.	.	.	.	.	.
3	0.759	38	.	.	.	.	.	.
4	1.027	38	.	.	.	.	.	.
5	1.023	35	.	.	.	.	.	.
6	1.117	34	.	.	.	.	.	.
7	1.706	34	.	.	.	.	.	.
8	1.129	32	.	.	.	.	.	.
9	0.879	31	.	.	.	.	.	.
10	0.702	30	.	.	.	.	.	.
11	0.919	30	.	.	.	.	.	.
12	0.990	29	.	.	.	.	.	.
13	0.838	28	.	.	.	.	.	.
14	0.912	26	.	.	.	.	.	.
15	1.481	26	.	.	.	.	.	.
16	1.760	25	.	.	.	.	.	.
17	0.985	24	.	.	.	.	.	.
18	1.059	24	.	.	.	.	.	.
19	0.673	23	.	.	.	.	.	.
20	0.993	23	.	.	.	.	.	.
21	0.982	22	.	.	.	.	.	.
22	1.533	22	.	.	.	.	.	.
23	1.063	21	.	.	.	.	.	.
24	1.199	21	.	.	.	.	.	.
25	1.374	21	.	.	.	.	.	.
26	0.726	19	.	.	.	.	.	.
27	1.741	19	.	.	.	.	.	.
28	0.952	17	.	.	.	.	.	.
29	1.237	17	.	.	.	.	.	.
30	1.629	17	.	.	.	.	.	.
31	1.586	16	.	.	.	.	.	.
32	0.493	15	.	.	.	.	.	.
33	1.002	15	.	.	.	.	.	.
34	1.065	15	.	.	.	.	.	.
35	0.839	14	.	.	.	.	.	.
36	1.070	14	.	.	.	.	.	.
37	1.728	14	.	.	.	.	.	.
38	0.574	13	.	.	.	.	.	.
39	0.665	13	.	.	.	.	.	.
40	1.178	13	.	.	.	.	.	.
41	1.280	13	.	.	.	.	.	.
42	1.297	13	.	.	.	.	.	.
43	0.190	12	.	.	.	.	.	.
44	0.666	12	.	.	.	.	.	.
45	0.310	11	.	.	.	.	.	.
46	0.603	11	.	.	.	.	.	.
47	1.082	11	.	.	.	.	.	.
48	1.131	11	.	.	.	.	.	.
49	1.146	11	.	.	.	.	.	.
50	0.411	10	.	.	.	.	.	.
51	0.780	10	.	.	.	.	.	.
52	1.009	10	.	.	.	.	.	.
53	1.160	10	.	.	.	.	.	.
54	1.219	10	.	.	.	.	.	.
55	1.224	9	.	.	.	.	.	.
56	0.220	8	.	.	.	.	.	.
57	0.670	8	.	.	.	.	.	.

Table E-3 (continued)

CENSUS REGION			NORTH CENTRAL					
CENSUS DIVISION			EAST NORTH CENTRAL			WEST NORTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average PRT	Number of Occurrences In Samples \bar{a}						
58	0.959	8						
59	1.178	8						
60	1.197	8						
61	1.626	8						
62	1.638	8						
63	0.360	7						
64	0.674	7						
65	0.897	7						
66	0.932	7						
67	1.051	7						
68	1.094	7						
69	1.427	7						
70	1.475	7						
71	1.681	7						
72	1.773	7						
73	0.337	6						
74	0.662	6						
75	0.880	6						
76	1.177	6						
77	1.253	6						
78	1.681	6						
79	0.278	5						
80	0.472	5						
81	0.736	5						
82	0.991	5						
83	1.057	5						
84	1.069	5						
85	1.073	5						
86	1.085	5						
87	1.195	5						
88	1.407	5						
89	0.399	4						
90	0.661	4						
91	0.730	4						
92	0.965	4						
93	1.068	4						
94	1.144	4						
95	1.195	4						
96	1.222	4						
97	1.326	4						
98	1.355	4						
99	1.389	4						
100	1.411	4						
101	1.538	4						
102	0.316	3						
103	0.608	3						
104	0.662	3						
105	0.747	3						
106	0.754	3						
107	0.855	3						
108	0.893	3						
109	0.918	3						
110	0.967	3						
111	1.019	3						
112	1.025	3						
113	1.041	3						
114	1.045	3						
115	1.050	3						

Table E-3 (continued)

CENSUS REGION			NORTH CENTRAL					
CENSUS DIVISION			EAST NORTH CENTRAL			WEST NORTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a						
116	1.055	3						
117	1.076	3						
118	1.107	3						
119	1.109	3						
120	1.186	3						
121	1.244	3						
122	1.251	3						
123	1.414	3						
124	1.457	3						
125	1.585	3						
126	0.325	2						
127	0.356	2						
128	0.747	2						
129	0.754	2						
130	0.817	2						
131	0.823	2						
132	0.855	2						
133	0.896	2						
134	0.898	2						
135	0.905	2						
136	0.933	2						
137	0.976	2						
138	0.982	2						
139	0.985	2						
140	1.020	2						
141	1.038	2						
142	1.053	2						
143	1.080	2						
144	1.106	2						
145	1.120	2						
146	1.124	2						
147	1.143	2						
148	1.152	2						
149	1.158	2						
150	1.179	2						
151	1.221	2						
152	1.252	2						
153	1.336	2						
154	1.345	2						
155	1.360	2						
156	1.382	2						
157	1.542	2						
158	1.577	2						
159	1.589	2						
160	1.600	2						
161	1.680	2						
162	1.727	2						
163	1.731	2						
164	0.229	1						
165	0.255	1						
166	0.266	1						
167	0.269	1						
168	0.279	1						
169	0.293	1						
170	0.300	1						
171	0.329	1						
172	0.357	1						
173	0.406	1						

Table E-3 (continued)

CENSUS REGION			NORTH CENTRAL					
CENSUS DIVISION			EAST NORTH CENTRAL			WEST NORTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a						
174	0.406	1						
175	0.463	1						
176	0.499	1						
177	0.539	1						
178	0.575	1						
179	0.672	1						
180	0.676	1						
181	0.708	1						
182	0.724	1						
183	0.732	1						
184	0.732	1						
185	0.734	1						
186	0.742	1						
187	0.743	1						
188	0.747	1						
189	0.749	1						
190	0.799	1						
191	0.829	1						
192	0.830	1						
193	0.855	1						
194	0.892	1						
195	0.911	1						
196	0.914	1						
197	0.973	1						
198	1.011	1						
199	1.018	1						
200	1.035	1						
201	1.051	1						
202	1.053	1						
203	1.060	1						
204	1.064	1						
205	1.075	1						
206	1.078	1						
207	1.084	1						
208	1.107	1						
209	1.117	1						
210	1.117	1						
211	1.118	1						
212	1.121	1						
213	1.122	1						
214	1.134	1						
215	1.134	1						
216	1.138	1						
217	1.140	1						
218	1.140	1						
219	1.152	1						
220	1.161	1						
221	1.170	1						
222	1.189	1						
223	1.208	1						
224	1.217	1						
225	1.226	1						
226	1.262	1						
227	1.288	1						
228	1.289	1						
229	1.304	1						
230	1.348	1						
231	1.349	1						

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Table E-3 (concluded)

Index	Average RRT	Number of Occurrences in Samples ^a	CENSUS REGION					
			NORTH CENTRAL					
			CENSUS DIVISION			WEST NORTH CENTRAL		
EAST NORTH CENTRAL			WEST NORTH CENTRAL					
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
232	1.349	1						
233	1.350	1						
234	1.356	1						
235	1.375	1						
236	1.379	1						
237	1.394	1						
238	1.407	1						
239	1.534	1						
240	1.588	1						
241	1.590	1						
242	1.596	1						
243	1.624	1						
244	1.634	1						
245	1.646	1						
246	1.659	1						
247	1.676	1						
248	1.678	1						
249	1.701	1						
250	1.709	1						
251	1.718	1						
252	1.721	1						
253	1.731	1						
254	1.734	1						
255	1.734	1						
256	1.740	1						
257	1.804	1						
258	1.889	1						

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

Table E-4. Unidentified Peaks in the 6% Florisil Semivolatile Organic Analysis Data Set - Northeast Census Region

Index	CENSUS REGION		NORTHEAST						
	CENSUS DIVISION		MIDDLE ATLANTIC			NEW ENGLAND			
	Average RRT	Number of Occurrences In Samples ^a	AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
I.S.	1.000	44	.	.	.	.	.	.	.
1	0.924	42	.	.	.	.	.	.	.
2	1.600	42	.	.	.	.	.	.	.
3	0.759	38	.	.	.	.	.	.	.
4	1.027	38	.	.	.	.	.	.	.
5	1.023	35	.	.	.	.	.	.	.
6	1.117	34	.	.	.	.	.	.	.
7	1.706	34	.	.	.	.	.	.	.
8	1.129	32	.	.	.	.	.	.	.
9	0.879	31	.	.	.	.	.	.	.
10	0.702	30	.	.	.	.	.	.	.
11	0.919	30	.	.	.	.	.	.	.
12	0.990	29	.	.	.	.	.	.	.
13	0.838	28	.	.	.	.	.	.	.
14	0.912	26	.	.	.	.	.	.	.
15	1.481	26	.	.	.	.	.	.	.
16	1.760	25	.	.	.	.	.	.	.
17	0.985	24	.	.	.	.	.	.	.
18	1.059	24	.	.	.	.	.	.	.
19	0.673	23	.	.	.	.	.	.	.
20	0.993	23	.	.	.	.	.	.	.
21	0.982	22	.	.	.	.	.	.	.
22	1.533	22	.	.	.	.	.	.	.
23	1.063	21	.	.	.	.	.	.	.
24	1.199	21	.	.	.	.	.	.	.
25	1.374	21	.	.	.	.	.	.	.
26	0.726	19	.	.	.	.	.	.	.
27	1.741	19	.	.	.	.	.	.	.
28	0.952	17	.	.	.	.	.	.	.
29	1.237	17	.	.	.	.	.	.	.
30	1.629	17	.	.	.	.	.	.	.
31	1.586	16	.	.	.	.	.	.	.
32	0.493	15	.	.	.	.	.	.	.
33	1.002	15	.	.	.	.	.	.	.
34	1.065	15	.	.	.	.	.	.	.
35	0.839	14	.	.	.	.	.	.	.
36	1.070	14	.	.	.	.	.	.	.
37	1.728	14	.	.	.	.	.	.	.
38	0.574	13	.	.	.	.	.	.	.
39	0.665	13	.	.	.	.	.	.	.
40	1.178	13	.	.	.	.	.	.	.
41	1.280	13	.	.	.	.	.	.	.
42	1.297	13	.	.	.	.	.	.	.
43	0.190	12	.	.	.	.	.	.	.
44	0.666	12	.	.	.	.	.	.	.
45	0.310	11	.	.	.	.	.	.	.
46	0.603	11	.	.	.	.	.	.	.
47	1.082	11	.	.	.	.	.	.	.
48	1.131	11	.	.	.	.	.	.	.
49	1.146	11	.	.	.	.	.	.	.
50	0.411	10	.	.	.	.	.	.	.
51	0.780	10	.	.	.	.	.	.	.
52	1.009	10	.	.	.	.	.	.	.
53	1.160	10	.	.	.	.	.	.	.

Table E-4 (continued)

CENSUS REGION			NORTHEAST					
CENSUS DIVISION			MIDDLE ATLANTIC			NEW ENGLAND		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a						
54	1.219	10			.			.
55	1.224	9			.			.
56	0.220	8	.	.			.	.
57	0.670	8			.			.
58	0.959	8			.			.
59	1.178	8			.			.
60	1.197	8			.			.
61	1.626	8			.			.
62	1.638	8			.			.
63	0.360	7			.			.
64	0.674	7	.	.			.	.
65	0.897	7			.		.	.
66	0.932	7			.		.	.
67	1.051	7			.		.	.
68	1.094	7			.		.	.
69	1.427	7		.	.		.	.
70	1.475	7	.	.	.		.	.
71	1.681	7			.		.	.
72	1.773	7			.		.	.
73	0.337	6			.		.	.
74	0.662	6		.	.		.	.
75	0.880	6		.	.		.	.
76	1.177	6		.	.		.	.
77	1.253	6		.	.		.	.
78	1.681	6		.	.		.	.
79	0.278	5		.	.		.	.
80	0.472	5		.	.		.	.
81	0.736	5			.		.	.
82	0.991	5			.		.	.
83	1.057	5			.		.	.
84	1.069	5		.	.		.	.
85	1.073	5		.	.		.	.
86	1.085	5		.	.		.	.
87	1.195	5		.	.		.	.
88	1.407	5		.	.		.	.
89	0.399	4		.	.		.	.
90	0.661	4		.	.		.	.
91	0.730	4			.		.	.
92	0.965	4	.		.		.	.
93	1.068	4			.		.	.
94	1.144	4			.		.	.
95	1.195	4			.		.	.
96	1.222	4			.		.	.
97	1.326	4			.		.	.
98	1.355	4			.		.	.
99	1.389	4			.		.	.
100	1.411	4			.		.	.
101	1.538	4			.		.	.
102	0.316	3			.		.	.
103	0.608	3			.		.	.
104	0.662	3			.		.	.
105	0.747	3			.		.	.
106	0.754	3			.		.	.
107	0.855	3			.		.	.

Table E-4 (continued)

CENSUS REGION			NORTHEAST					
CENSUS DIVISION			MIDDLE ATLANTIC			NEW ENGLAND		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a						
108	0.893	3						
109	0.918	3						
110	0.967	3						
111	1.019	3						
112	1.025	3						
113	1.041	3						
114	1.045	3						
115	1.050	3						
116	1.055	3						
117	1.076	3						
118	1.107	3						
119	1.109	3						
120	1.186	3						
121	1.244	3						
122	1.251	3						
123	1.414	3						
124	1.457	3						
125	1.585	3						
126	0.325	2						
127	0.356	2						
128	0.747	2						
129	0.754	2						
130	0.817	2						
131	0.823	2						
132	0.855	2						
133	0.896	2						
134	0.898	2						
135	0.905	2						
136	0.933	2						
137	0.976	2						
138	0.982	2						
139	0.985	2						
140	1.020	2						
141	1.038	2						
142	1.053	2						
143	1.080	2						
144	1.106	2						
145	1.120	2						
146	1.124	2						
147	1.143	2						
148	1.152	2						
149	1.158	2						
150	1.179	2						
151	1.221	2						
152	1.252	2						
153	1.336	2						
154	1.345	2						
155	1.360	2						
156	1.382	2						
157	1.542	2						
158	1.577	2						
159	1.589	2						
160	1.600	2						
161	1.680	2						

Table E-4 (continued)

Index	CENSUS REGION		NORTHEAST					
	CENSUS DIVISION		MIDDLE ATLANTIC			NEW ENGLAND		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
	Average RRT	Number of Occurrences In Samples ^a						
162	1.727	2						
163	1.731	2						
164	0.229	1						
165	0.255	1						
166	0.266	1						
167	0.269	1						
168	0.279	1						
169	0.293	1						
170	0.300	1						
171	0.329	1						
172	0.357	1						
173	0.406	1						
174	0.406	1						
175	0.463	1						
176	0.499	1						
177	0.539	1						
178	0.575	1						
179	0.672	1						
180	0.676	1						
181	0.708	1						
182	0.724	1						
183	0.732	1						
184	0.732	1						
185	0.734	1						
186	0.742	1						
187	0.743	1						
188	0.747	1						
189	0.749	1						
190	0.799	1						
191	0.829	1						
192	0.830	1						
193	0.855	1						
194	0.892	1						
195	0.911	1						
196	0.914	1						
197	0.973	1						
198	1.011	1						
199	1.018	1						
200	1.035	1						
201	1.051	1						
202	1.053	1						
203	1.060	1						
204	1.064	1						
205	1.075	1						
206	1.078	1						
207	1.084	1						
208	1.107	1						
209	1.117	1						
210	1.117	1						
211	1.118	1						
212	1.121	1						
213	1.122	1						
214	1.134	1						
215	1.134	1						

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Table E-4 (concluded)

CENSUS REGION			NORTHEAST					
CENSUS DIVISION			MIDDLE ATLANTIC			NEW ENGLAND		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a						
216	1.138	1						
217	1.140	1						
218	1.140	1						
219	1.152	1						
220	1.161	1						
221	1.170	1						
222	1.189	1						
223	1.208	1						
224	1.217	1						
225	1.226	1						
226	1.262	1						
227	1.288	1						
228	1.289	1						
229	1.304	1						
230	1.348	1						
231	1.349	1						
232	1.349	1						
233	1.350	1						
234	1.356	1						
235	1.375	1						
236	1.379	1						
237	1.394	1						
238	1.407	1						
239	1.534	1						
240	1.588	1						
241	1.590	1						
242	1.596	1						
243	1.624	1						
244	1.634	1						
245	1.646	1						
246	1.659	1						
247	1.676	1						
248	1.678	1						
249	1.701	1						
250	1.709	1						
251	1.718	1						
252	1.721	1						
253	1.731	1						
254	1.734	1						
255	1.734	1						
256	1.740	1						
257	1.804	1						
258	1.889	1						

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

APPENDIX F

DOT MATRIX TABLE FOR UNIDENTIFIED HRGC/MS PEAKS IN THE 15/50% FLORISIL
SEMIVOLATILE ORGANIC ANALYSIS DATA SET; UNIDENTIFIED SEMIVOLATILE
ORGANIC COMPOUND RESPONSES VS. CENSUS REGION,
CENSUS DIVISION, AND AGE GROUP

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Table F-1. Unidentified Peaks in the 15/50% Florisil Semivolatile Organic Analysis Data Set - West Census Region

Index	Average RRT	Number of Occurrences In Samples ^a	CENSUS REGION WEST			CENSUS DIVISION		
			MOUNTAIN			PACIFIC		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
IS.	1.000	46	.	.	.	.	.	.
1	1.920	44	.	.	.	.	.	.
2	0.419	42	.	.	.	.	.	.
3	1.052	41	.	.	.	.	.	.
4	1.007	40	.	.	.	.	.	.
5	0.452	38	.	.	.	.	.	.
6	1.616	38	.	.	.	.	.	.
7	0.402	37	.	.	.	.	.	.
8	0.633	35	.	.	.	.	.	.
9	1.742	35	.	.	.	.	.	.
10	0.449	34	.	.	.	.	.	.
11	1.569	34	.	.	.	.	.	.
12	2.034	34	.	.	.	.	.	.
13	1.692	33	.	.	.	.	.	.
14	1.682	32	.	.	.	.	.	.
15	1.710	32	.	.	.	.	.	.
16	0.437	29	.	.	.	.	.	.
17	0.606	29	.	.	.	.	.	.
18	1.238	29	.	.	.	.	.	.
19	1.657	28	.	.	.	.	.	.
20	1.187	28	.	.	.	.	.	.
21	1.453	28	.	.	.	.	.	.
22	0.839	27	.	.	.	.	.	.
23	1.665	27	.	.	.	.	.	.
24	0.647	26	.	.	.	.	.	.
25	1.128	26	.	.	.	.	.	.
26	2.059	26	.	.	.	.	.	.
27	1.953	25	.	.	.	.	.	.
28	1.440	25	.	.	.	.	.	.
29	1.490	24	.	.	.	.	.	.
30	1.722	23	.	.	.	.	.	.
31	1.430	22	.	.	.	.	.	.
32	0.932	21	.	.	.	.	.	.
33	1.115	21	.	.	.	.	.	.
34	1.223	21	.	.	.	.	.	.
35	2.009	20	.	.	.	.	.	.
36	0.589	20	.	.	.	.	.	.
37	1.147	20	.	.	.	.	.	.
38	1.567	20	.	.	.	.	.	.
39	1.235	19	.	.	.	.	.	.
40	1.178	18	.	.	.	.	.	.
41	0.555	18	.	.	.	.	.	.
42	0.990	17	.	.	.	.	.	.
43	1.319	17	.	.	.	.	.	.
44	1.629	16	.	.	.	.	.	.
45	0.876	16	.	.	.	.	.	.
46	0.680	15	.	.	.	.	.	.
47	0.912	15	.	.	.	.	.	.
48	1.086	15	.	.	.	.	.	.
49	1.089	15	.	.	.	.	.	.
50	1.556	15	.	.	.	.	.	.
51	1.980	15	.	.	.	.	.	.
52	1.929	14	.	.	.	.	.	.
53	0.982	14	.	.	.	.	.	.
54	1.809	14	.	.	.	.	.	.
55	1.027	13	.	.	.	.	.	.
56	1.210	13	.	.	.	.	.	.
57	1.500	13	.	.	.	.	.	.

Table F-1 (continued)

CENSUS REGION			WEST					
CENSUS DIVISION			MOUNTAIN			PACIFIC		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples						
58	1.950	13			.			
59	0.586	12			.			
60	0.858	12			.			
61	1.511	12			.			
62	1.961	12		.	.			
63	2.014	12		.	.			
64	2.088	12		.	.			
65	0.996	11		.	.			
66	1.027	11		.	.			
67	0.218	11	.	.	.			
68	0.398	11	.	.	.			
69	1.475	11	.	.	.			
70	1.522	11	.	.	.			
71	1.542	11			.			
72	1.980	11		.	.			
73	0.745	10		.	.			
74	0.904	10	.	.	.			
75	1.105	10	.	.	.			
76	1.359	10	.	.	.			
77	0.429	9	.	.	.			
78	0.673	9	.	.	.			
79	0.897	9	.	.	.			
80	1.548	9	.	.	.			
81	1.989	9			.			
82	0.226	8	.	.	.			
83	0.243	8	.	.	.			
84	0.989	8	.	.	.			
85	1.149	8	.	.	.			
86	1.351	8	.	.	.			
87	1.973	8	.	.	.			
88	2.151	8	.	.	.			
89	2.174	8	.	.	.			
90	0.301	7	.	.	.			
91	0.392	7	.	.	.			
92	0.520	7	.	.	.			
93	0.672	7	.	.	.			
94	1.198	7	.	.	.			
95	1.675	7	.	.	.			
96	1.689	7	.	.	.			
97	0.492	6	.	.	.			
98	0.758	6	.	.	.			
99	1.175	6	.	.	.			
100	1.202	6	.	.	.			
101	1.308	6	.	.	.			
102	1.472	6	.	.	.			
103	1.531	6	.	.	.			
104	1.966	6	.	.	.			
105	2.137	6	.	.	.			
106	1.531	5	.	.	.			
107	0.374	5	.	.	.			
108	0.450	5	.	.	.			
109	0.540	5	.	.	.			
110	0.547	5	.	.	.			
111	0.559	5	.	.	.			
112	0.573	5	.	.	.			
113	0.762	5	.	.	.			
114	0.918	5	.	.	.			
115	1.062	5	.	.	.			

000066

Table F-1 (continued)

Index	CENSUS REGION		WEST					
	CENSUS DIVISION		MOUNTAIN			PACIFIC		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
	Average RRT	Number of Occurrences In Samples \bar{a}						
116	1.070	5						
117	1.105	5						
118	1.138	5						
119	1.175	5						
120	1.288	5						
121	1.460	5						
122	1.716	5						
123	1.729	5						
124	0.475	4						
125	0.507	4						
126	0.520	4						
127	0.667	4						
128	0.721	4						
129	0.832	4						
130	0.936	4						
131	1.061	4						
132	1.109	4						
133	1.153	4						
134	1.173	4						
135	1.277	4						
136	1.328	4						
137	1.580	4						
138	1.927	4						
139	1.979	4						
140	2.000	4						
141	0.319	3						
142	0.375	3						
143	0.609	3						
144	0.307	3						
145	0.346	3						
146	0.353	3						
147	0.487	3						
148	0.727	3						
149	0.799	3						
150	0.790	3						
151	0.821	3						
152	0.828	3						
153	1.083	3						
154	1.119	3						
155	1.123	3						
156	1.195	3						
157	1.309	3						
158	1.404	3						
159	1.448	3						
160	1.538	3						
161	1.856	3						
162	1.953	3						
163	2.084	3						
164	2.091	3						
165	0.512	2						
166	0.572	2						
167	1.809	2						
168	1.900	2						
169	0.237	2						
170	0.261	2						
171	0.337	2						
172	0.341	2						
173	0.342	2						

000067

Table F-1 (continued)

Index	Average RRT	Number of Occurrences In Samples ²	WEST					
			MOUNTAIN			PACIFIC		
			0-14	15-44	45+	0-14	15-44	45+
174	0.382	2						
175	0.413	2						
176	0.435	2						
177	0.450	2						
178	0.489	2						
179	0.496	2						
180	0.552	2						
181	0.599	2						
182	0.614	2						
183	0.677	2						
184	0.758	2						
185	0.791	2						
186	0.908	2						
187	0.921	2						
188	0.957	2						
189	1.059	2						
190	1.261	2						
191	1.283	2						
192	1.291	2						
193	1.297	2						
194	1.353	2						
195	1.463	2						
196	1.507	2						
197	1.516	2						
198	1.525	2						
199	1.586	2						
200	1.594	2						
201	1.673	2						
202	1.866	2						
203	1.931	2						
204	2.030	2						
205	2.102	2						
206	0.333	1						
207	0.544	1						
208	0.199	1						
209	0.203	1						
210	0.216	1						
211	0.221	1						
212	0.239	1						
213	0.240	1						
214	0.241	1						
215	0.254	1						
216	0.266	1						
217	0.268	1						
218	0.283	1						
219	0.285	1						
220	0.293	1						
221	0.300	1						
222	0.327	1						
223	0.344	1						
224	0.352	1						
225	0.353	1						
226	0.358	1						
227	0.359	1						
228	0.362	1						
229	0.365	1						
230	0.370	1						
231	0.371	1						

Table F-1 (continued)

Index	Average RRT	Number of Occurrences In Samples ^a	CENSUS REGION			WEST		
			CENSUS DIVISION			PACIFIC		
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
232	0.372	1						
233	0.394	1						
234	0.405	1						
235	0.414	1						
236	0.419	1						
237	0.421	1						
238	0.422	1						
239	0.455	1						
240	0.463	1						
241	0.465	1						
242	0.504	1						
243	0.507	1						
244	0.510	1						
245	0.516	1						
246	0.545	1						
247	0.575	1						
248	0.584	1						
249	0.652	1						
250	0.653	1						
251	0.678	1						
252	0.683	1						
253	0.711	1						
254	0.744	1						
255	0.745	1						
256	0.767	1						
257	0.771	1						
258	0.775	1						
259	0.779	1						
260	0.786	1						
261	0.787	1						
262	0.821	1						
263	0.915	1						
264	0.929	1						
265	0.945	1						
266	0.960	1						
267	0.988	1						
268	1.017	1						
269	1.018	1						
270	1.037	1						
271	1.046	1						
272	1.061	1						
273	1.063	1						
274	1.070	1						
275	1.089	1						
276	1.091	1						
277	1.112	1						
278	1.121	1						
279	1.140	1						
280	1.174	1						
281	1.180	1						
282	1.197	1						
283	1.204	1						
284	1.204	1						
285	1.218	1						
286	1.223	1						
287	1.226	1						
288	1.243	1						
289	1.248	1						

Table F-1 (concluded)

Index	CENSUS REGION		WEST					
	CENSUS DIVISION		MOUNTAIN			PACIFIC		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
	Average RRT	Number of Occurrences ^a In Samples						
290	1.289	1						
291	1.291	1						
292	1.296	1						
293	1.309	1						
294	1.311	1						
295	1.335	1						
296	1.342	1						
297	1.346	1						
298	1.348	1						
299	1.350	1						
300	1.363	1						
301	1.366	1						
302	1.377	1						
303	1.384	1						
304	1.386	1						
305	1.390	1						
306	1.403	1						
307	1.421	1						
308	1.422	1						
309	1.427	1						
310	1.433	1						
311	1.435	1						
312	1.457	1						
313	1.481	1						
314	1.492	1						
315	1.495	1						
316	1.499	1						
317	1.523	1						
318	1.525	1						
319	1.531	1						
320	1.545	1						
321	1.562	1						
322	1.583	1						
323	1.584	1						
324	1.589	1						
325	1.596	1						
326	1.602	1						
327	1.606	1						
328	1.607	1						
329	1.671	1						
330	1.695	1						
331	1.740	1						
332	1.761	1						
333	1.762	1						
334	1.776	1						
335	1.839	1						
336	1.907	1						
337	1.964	1						
338	1.973	1						
339	1.980	1						
340	1.991	1						
341	2.053	1						
342	2.063	1						
343	2.107	1						

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

Table F-2. Unidentified Peaks in the 15/50% Florisil Semivolatile Organic Analysis Data Set - South Central Region

Index	Average RRT	Number of Occurrences In Samples \bar{x}	CENSUS REGION SOUTH											
			CENSUS DIVISION EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL					
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+		
1S.	1.000	46	.	.	.	.	.	.	.	.	.	.	.	.
1	1.920	44	.	.	.	.	.	.	.	.	.	.	.	.
2	0.419	42	.	.	.	.	.	.	.	.	.	.	.	.
3	1.052	41	.	.	.	.	.	.	.	.	.	.	.	.
4	1.007	40	.	.	.	.	.	.	.	.	.	.	.	.
5	0.452	38	.	.	.	.	.	.	.	.	.	.	.	.
6	1.616	38	.	.	.	.	.	.	.	.	.	.	.	.
7	0.402	37	.	.	.	.	.	.	.	.	.	.	.	.
8	0.633	35	.	.	.	.	.	.	.	.	.	.	.	.
9	1.742	35	.	.	.	.	.	.	.	.	.	.	.	.
10	0.449	34	.	.	.	.	.	.	.	.	.	.	.	.
11	1.569	34	.	.	.	.	.	.	.	.	.	.	.	.
12	2.034	34	.	.	.	.	.	.	.	.	.	.	.	.
13	1.692	33	.	.	.	.	.	.	.	.	.	.	.	.
14	1.682	32	.	.	.	.	.	.	.	.	.	.	.	.
15	1.710	32	.	.	.	.	.	.	.	.	.	.	.	.
16	0.437	29	.	.	.	.	.	.	.	.	.	.	.	.
17	0.606	29	.	.	.	.	.	.	.	.	.	.	.	.
18	1.238	29	.	.	.	.	.	.	.	.	.	.	.	.
19	1.657	28	.	.	.	.	.	.	.	.	.	.	.	.
20	1.187	28	.	.	.	.	.	.	.	.	.	.	.	.
21	1.453	28	.	.	.	.	.	.	.	.	.	.	.	.
22	0.839	27	.	.	.	.	.	.	.	.	.	.	.	.
23	1.665	27	.	.	.	.	.	.	.	.	.	.	.	.
24	0.647	26	.	.	.	.	.	.	.	.	.	.	.	.
25	1.128	26	.	.	.	.	.	.	.	.	.	.	.	.
26	2.059	26	.	.	.	.	.	.	.	.	.	.	.	.
27	1.953	25	.	.	.	.	.	.	.	.	.	.	.	.
28	1.440	25	.	.	.	.	.	.	.	.	.	.	.	.
29	1.490	24	.	.	.	.	.	.	.	.	.	.	.	.
30	1.722	23	.	.	.	.	.	.	.	.	.	.	.	.
31	1.430	22	.	.	.	.	.	.	.	.	.	.	.	.
32	0.932	21	.	.	.	.	.	.	.	.	.	.	.	.
33	1.115	21	.	.	.	.	.	.	.	.	.	.	.	.
34	1.223	21	.	.	.	.	.	.	.	.	.	.	.	.
35	2.009	20	.	.	.	.	.	.	.	.	.	.	.	.
36	0.589	20	.	.	.	.	.	.	.	.	.	.	.	.
37	1.147	20	.	.	.	.	.	.	.	.	.	.	.	.
38	1.567	20	.	.	.	.	.	.	.	.	.	.	.	.
39	1.235	19	.	.	.	.	.	.	.	.	.	.	.	.
40	1.178	18	.	.	.	.	.	.	.	.	.	.	.	.
41	0.555	18	.	.	.	.	.	.	.	.	.	.	.	.
42	0.990	17	.	.	.	.	.	.	.	.	.	.	.	.
43	1.319	17	.	.	.	.	.	.	.	.	.	.	.	.
44	1.629	16	.	.	.	.	.	.	.	.	.	.	.	.
45	0.876	16	.	.	.	.	.	.	.	.	.	.	.	.
46	0.680	15	.	.	.	.	.	.	.	.	.	.	.	.
47	0.912	15	.	.	.	.	.	.	.	.	.	.	.	.
48	1.086	15	.	.	.	.	.	.	.	.	.	.	.	.
49	1.089	15	.	.	.	.	.	.	.	.	.	.	.	.
50	1.556	15	.	.	.	.	.	.	.	.	.	.	.	.
51	1.980	15	.	.	.	.	.	.	.	.	.	.	.	.
52	1.929	14	.	.	.	.	.	.	.	.	.	.	.	.
53	0.982	14	.	.	.	.	.	.	.	.	.	.	.	.
54	1.809	14	.	.	.	.	.	.	.	.	.	.	.	.
55	1.027	13	.	.	.	.	.	.	.	.	.	.	.	.
56	1.210	13	.	.	.	.	.	.	.	.	.	.	.	.
57	1.500	13	.	.	.	.	.	.	.	.	.	.	.	.

Table F-2 (continued)

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST-SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples \bar{a}									
58	1.950	13									
59	0.586	12	.		.	.	.	.	.	.	.
60	0.858	12	.		.	.	.	.	.	.	.
61	1.511	12	.		.	.	.	.	.	.	.
62	1.961	12	.	.	.	.	.	.	.	.	.
63	2.014	12	.	.	.	.	.	.	.	.	.
64	2.088	12	.	.	.	.	.	.	.	.	.
65	0.996	11	.	.	.	.	.	.	.	.	.
66	1.027	11	.	.	.	.	.	.	.	.	.
67	0.218	11	.	.	.	.	.	.	.	.	.
68	0.398	11	.	.	.	.	.	.	.	.	.
69	1.475	11	.	.	.	.	.	.	.	.	.
70	1.522	11	.	.	.	.	.	.	.	.	.
71	1.542	11	.	.	.	.	.	.	.	.	.
72	1.960	11	.	.	.	.	.	.	.	.	.
73	0.745	10	.	.	.	.	.	.	.	.	.
74	0.904	10	.	.	.	.	.	.	.	.	.
75	1.105	10	.	.	.	.	.	.	.	.	.
76	1.359	10	.	.	.	.	.	.	.	.	.
77	0.429	9	.	.	.	.	.	.	.	.	.
78	0.673	9	.	.	.	.	.	.	.	.	.
79	0.897	9	.	.	.	.	.	.	.	.	.
80	1.548	9	.	.	.	.	.	.	.	.	.
81	1.989	9	.	.	.	.	.	.	.	.	.
82	0.226	8	.	.	.	.	.	.	.	.	.
83	0.243	8	.	.	.	.	.	.	.	.	.
84	0.989	8	.	.	.	.	.	.	.	.	.
85	1.149	8	.	.	.	.	.	.	.	.	.
86	1.351	8	.	.	.	.	.	.	.	.	.
87	1.973	8	.	.	.	.	.	.	.	.	.
88	2.151	8	.	.	.	.	.	.	.	.	.
89	2.174	8	.	.	.	.	.	.	.	.	.
90	0.301	7	.	.	.	.	.	.	.	.	.
91	0.392	7	.	.	.	.	.	.	.	.	.
92	0.520	7	.	.	.	.	.	.	.	.	.
93	0.672	7	.	.	.	.	.	.	.	.	.
94	1.198	7	.	.	.	.	.	.	.	.	.
95	1.675	7	.	.	.	.	.	.	.	.	.
96	1.889	7	.	.	.	.	.	.	.	.	.
97	0.492	6	.	.	.	.	.	.	.	.	.
98	0.758	6	.	.	.	.	.	.	.	.	.
99	1.175	6	.	.	.	.	.	.	.	.	.
100	1.202	6	.	.	.	.	.	.	.	.	.
101	1.308	6	.	.	.	.	.	.	.	.	.
102	1.472	6	.	.	.	.	.	.	.	.	.
103	1.531	6	.	.	.	.	.	.	.	.	.
104	1.966	6	.	.	.	.	.	.	.	.	.
105	2.137	6	.	.	.	.	.	.	.	.	.
106	1.531	5	.	.	.	.	.	.	.	.	.
107	0.374	5	.	.	.	.	.	.	.	.	.
108	0.450	5	.	.	.	.	.	.	.	.	.
109	0.540	5	.	.	.	.	.	.	.	.	.
110	0.547	5	.	.	.	.	.	.	.	.	.
111	0.559	5	.	.	.	.	.	.	.	.	.
112	0.573	5	.	.	.	.	.	.	.	.	.
113	0.762	5	.	.	.	.	.	.	.	.	.
114	0.918	5	.	.	.	.	.	.	.	.	.
115	1.062	5	.	.	.	.	.	.	.	.	.

Table F-2 (continued)

Index	Average RRT	Number of Occurrences In Samples ^a	EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
			AGE GROUP			AGE GROUP			AGE GROUP		
			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
116	1.070	5									
117	1.105	5									
118	1.138	5									
119	1.175	5									
120	1.288	5									
121	1.460	5									
122	1.716	5									
123	1.729	5									
124	0.475	4									
125	0.507	4									
126	0.520	4									
127	0.667	4									
128	0.721	4									
129	0.832	4									
130	0.936	4									
131	1.061	4									
132	1.109	4									
133	1.153	4									
134	1.173	4									
135	1.277	4									
136	1.328	4									
137	1.580	4									
138	1.927	4									
139	1.979	4									
140	2.000	4									
141	0.319	3									
142	0.375	3									
143	0.609	3									
144	0.307	3									
145	0.346	3									
146	0.353	3									
147	0.487	3									
148	0.727	3									
149	0.739	3									
150	0.790	3									
151	0.821	3									
152	0.828	3									
153	1.083	3									
154	1.119	3									
155	1.123	3									
156	1.195	3									
157	1.309	3									
158	1.404	3									
159	1.448	3									
160	1.538	3									
161	1.856	3									
162	1.953	3									
163	2.084	3									
164	2.091	3									
165	0.512	2									
166	0.572	2									
167	1.809	2									
168	1.900	2									
169	0.237	2									
170	0.261	2									
171	0.337	2									
172	0.341	2									
173	0.342	2									

Table F-2 (continued)

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a									
174	0.382	2									
175	0.413	2									
176	0.435	2									
177	0.450	2									
178	0.489	2									
179	0.496	2									
180	0.552	2									
181	0.599	2									
182	0.614	2									
183	0.677	2									
184	0.758	2									
185	0.791	2									
186	0.908	2									
187	0.921	2									
188	0.957	2									
189	1.059	2									
190	1.261	2									
191	1.283	2									
192	1.291	2									
193	1.297	2									
194	1.353	2									
195	1.463	2									
196	1.507	2									
197	1.516	2									
198	1.525	2									
199	1.586	2									
200	1.594	2									
201	1.673	2									
202	1.866	2									
203	1.931	2									
204	2.030	2									
205	2.102	2									
206	0.333	1									
207	0.544	1									
208	0.199	1									
209	0.203	1									
210	0.216	1									
211	0.221	1									
212	0.239	1									
213	0.240	1									
214	0.241	1									
215	0.254	1									
216	0.266	1									
217	0.268	1									
218	0.283	1									
219	0.285	1									
220	0.293	1									
221	0.300	1									
222	0.327	1									
223	0.344	1									
224	0.352	1									
225	0.353	1									
226	0.358	1									
227	0.359	1									
228	0.362	1									
229	0.365	1									
230	0.370	1									
231	0.371	1									

Table F-2 (continued)

CENSUS REGION			SOUTH								
CENSUS DIVISION			EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a									
232	0.372	1									
233	0.394	1									
234	0.405	1									
235	0.414	1									
236	0.419	1									
237	0.421	1									
238	0.422	1									
239	0.455	1									
240	0.463	1									
241	0.465	1									
242	0.504	1									
243	0.507	1									
244	0.510	1									
245	0.516	1									
246	0.545	1									
247	0.575	1									
248	0.584	1									
249	0.652	1									
250	0.653	1									
251	0.678	1									
252	0.683	1									
253	0.711	1									
254	0.744	1									
255	0.745	1									
256	0.767	1									
257	0.771	1									
258	0.775	1									
259	0.779	1									
260	0.786	1									
261	0.787	1									
262	0.821	1									
263	0.915	1									
264	0.929	1									
265	0.945	1									
266	0.960	1									
267	0.988	1									
268	1.017	1									
269	1.018	1									
270	1.037	1									
271	1.046	1									
272	1.061	1									
273	1.063	1									
274	1.070	1									
275	1.089	1									
276	1.091	1									
277	1.112	1									
278	1.121	1									
279	1.140	1									
280	1.174	1									
281	1.180	1									
282	1.197	1									
283	1.204	1									
284	1.204	1									
285	1.218	1									
286	1.223	1									
287	1.226	1									
288	1.243	1									
289	1.248	1									

Table F-2 (concluded)

Index	Average RRT	Number of Occurrences In Samples ^a	CENSUS REGION SOUTH											
			CENSUS DIVISION EAST SOUTH CENTRAL			SOUTH ATLANTIC			WEST SOUTH CENTRAL					
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+	0-14	15-44	45+		
290	1.289	1												
291	1.291	1												
292	1.296	1												
293	1.309	1												
294	1.311	1												
295	1.335	1												
296	1.342	1												
297	1.346	1												
298	1.348	1												
299	1.350	1												
300	1.363	1												
301	1.366	1												
302	1.377	1												
303	1.384	1												
304	1.386	1												
305	1.390	1												
306	1.403	1												
307	1.421	1												
308	1.422	1												
309	1.427	1												
310	1.433	1												
311	1.435	1												
312	1.457	1												
313	1.481	1												
314	1.492	1												
315	1.495	1												
316	1.499	1												
317	1.523	1												
318	1.525	1												
319	1.531	1												
320	1.545	1												
321	1.562	1												
322	1.583	1												
323	1.584	1												
324	1.589	1												
325	1.596	1												
326	1.602	1												
327	1.606	1												
328	1.607	1												
329	1.671	1												
330	1.695	1												
331	1.740	1												
332	1.761	1												
333	1.762	1												
334	1.776	1												
335	1.839	1												
336	1.907	1												
337	1.964	1												
338	1.973	1												
339	1.980	1												
340	1.991	1												
341	2.053	1												
342	2.063	1												
343	2.107	1												

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

Table F-3. Unidentified Peaks in the 15/50% Florisil Semivolatile Organic Analysis Data Set - North Central Census Region

CENSUS REGION			NORTH CENTRAL					
CENSUS DIVISION			EAST NORTH CENTRAL			WEST NORTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RFT	Number of Occurrences In Samples ^a						
I.S.	1.000	46	.	.	.	.	.	.
1	1.920	44	.	.	.	.	.	.
2	0.419	42	.	.	.	.	.	.
3	1.052	41	.	.	.	.	.	.
4	1.007	40	.	.	.	.	.	.
5	0.452	38	.	.	.	.	.	.
6	1.616	38	.	.	.	.	.	.
7	0.402	37	.	.	.	.	.	.
8	0.633	35	.	.	.	.	.	.
9	1.742	35	.	.	.	.	.	.
10	0.449	34	.	.	.	.	.	.
11	1.569	34	.	.	.	.	.	.
12	2.034	34	.	.	.	.	.	.
13	1.692	33	.	.	.	.	.	.
14	1.682	32	.	.	.	.	.	.
15	1.710	32	.	.	.	.	.	.
16	0.437	29	.	.	.	.	.	.
17	0.606	29	.	.	.	.	.	.
18	1.238	29	.	.	.	.	.	.
19	1.657	28	.	.	.	.	.	.
20	1.187	28	.	.	.	.	.	.
21	1.453	28	.	.	.	.	.	.
22	0.839	27	.	.	.	.	.	.
23	1.665	27	.	.	.	.	.	.
24	0.647	26	.	.	.	.	.	.
25	1.128	26	.	.	.	.	.	.
26	2.059	26	.	.	.	.	.	.
27	1.953	25	.	.	.	.	.	.
28	1.440	25	.	.	.	.	.	.
29	1.490	24	.	.	.	.	.	.
30	1.722	23	.	.	.	.	.	.
31	1.430	22	.	.	.	.	.	.
32	0.932	21	.	.	.	.	.	.
33	1.115	21	.	.	.	.	.	.
34	1.223	21	.	.	.	.	.	.
35	2.009	20	.	.	.	.	.	.
36	0.589	20	.	.	.	.	.	.
37	1.147	20	.	.	.	.	.	.
38	1.567	20	.	.	.	.	.	.
39	1.235	19	.	.	.	.	.	.
40	1.178	18	.	.	.	.	.	.
41	0.555	18	.	.	.	.	.	.
42	0.990	17	.	.	.	.	.	.
43	1.319	17	.	.	.	.	.	.
44	1.629	16	.	.	.	.	.	.
45	0.876	16	.	.	.	.	.	.
46	0.680	15	.	.	.	.	.	.
47	0.912	15	.	.	.	.	.	.
48	1.086	15	.	.	.	.	.	.
49	1.089	15	.	.	.	.	.	.
50	1.556	15	.	.	.	.	.	.
51	1.980	15	.	.	.	.	.	.
52	1.929	14	.	.	.	.	.	.
53	0.982	14	.	.	.	.	.	.
54	1.809	14	.	.	.	.	.	.
55	1.027	13	.	.	.	.	.	.
56	1.210	13	.	.	.	.	.	.
57	1.500	13	.	.	.	.	.	.

Table F-3 (continued)

CENSUS REGION			NORTH CENTRAL					
CENSUS DIVISION			EAST NORTH CENTRAL			WEST NORTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a						
58	1.950	13	.	.	.	.	.	.
59	0.586	12	.	.	.	.	.	.
60	0.858	12	.	.	.	.	.	.
61	1.511	12	.	.	.	.	.	.
62	1.961	12	.	.	.	.	.	.
63	2.014	12	.	.	.	.	.	.
64	2.088	12	.	.	.	.	.	.
65	0.996	11	.	.	.	.	.	.
66	1.027	11	.	.	.	.	.	.
67	0.218	11	.	.	.	.	.	.
68	0.398	11	.	.	.	.	.	.
69	1.475	11	.	.	.	.	.	.
70	1.522	11	.	.	.	.	.	.
71	1.542	11	.	.	.	.	.	.
72	1.980	11	.	.	.	.	.	.
73	0.745	10	.	.	.	.	.	.
74	0.904	10	.	.	.	.	.	.
75	1.105	10	.	.	.	.	.	.
76	1.359	10	.	.	.	.	.	.
77	0.429	9	.	.	.	.	.	.
78	0.673	9	.	.	.	.	.	.
79	0.897	9	.	.	.	.	.	.
80	1.548	9	.	.	.	.	.	.
81	1.989	9	.	.	.	.	.	.
82	0.226	8	.	.	.	.	.	.
83	0.243	8	.	.	.	.	.	.
84	0.989	8	.	.	.	.	.	.
85	1.149	8	.	.	.	.	.	.
86	1.351	8	.	.	.	.	.	.
87	1.973	8	.	.	.	.	.	.
88	2.151	8	.	.	.	.	.	.
89	2.174	8	.	.	.	.	.	.
90	0.301	7	.	.	.	.	.	.
91	0.392	7	.	.	.	.	.	.
92	0.520	7	.	.	.	.	.	.
93	0.672	7	.	.	.	.	.	.
94	1.198	7	.	.	.	.	.	.
95	1.675	7	.	.	.	.	.	.
96	1.889	7	.	.	.	.	.	.
97	0.492	6	.	.	.	.	.	.
98	0.758	6	.	.	.	.	.	.
99	1.175	6	.	.	.	.	.	.
100	1.202	6	.	.	.	.	.	.
101	1.308	6	.	.	.	.	.	.
102	1.472	6	.	.	.	.	.	.
103	1.531	6	.	.	.	.	.	.
104	1.966	6	.	.	.	.	.	.
105	2.137	6	.	.	.	.	.	.
106	1.531	5	.	.	.	.	.	.
107	0.374	5	.	.	.	.	.	.
108	0.450	5	.	.	.	.	.	.
109	0.540	5	.	.	.	.	.	.
110	0.547	5	.	.	.	.	.	.
111	0.559	5	.	.	.	.	.	.
112	0.573	5	.	.	.	.	.	.
113	0.762	5	.	.	.	.	.	.
114	0.918	5	.	.	.	.	.	.
115	1.062	5	.	.	.	.	.	.

Table F-3 (continued)

CENSUS REGION			NORTH CENTRAL					
CENSUS DIVISION			EAST NORTH CENTRAL			WEST NORTH CENTRAL		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences in Samples \bar{a}						
116	1.070	5			..			
117	1.105	5						.
118	1.138	5			..			..
119	1.175	5	.	.				
120	1.288	5						
121	1.460	5						
122	1.716	5	.					
123	1.729	5						..
124	0.475	4	.					
125	0.507	4						
126	0.520	4						
127	0.667	4	.		.			
128	0.721	4						
129	0.832	4						
130	0.936	4	.					
131	1.061	4	.					
132	1.109	4	.					
133	1.153	4						
134	1.173	4			..			
135	1.277	4						.
136	1.328	4						..
137	1.580	4						..
138	1.927	4	.	.				
139	1.979	4						.
140	2.000	4			..			.
141	0.319	3	.	..				
142	0.375	3	.					
143	0.609	3						.
144	0.307	3						
145	0.346	3	.					
146	0.353	3						
147	0.487	3						
148	0.727	3						.
149	0.739	3						
150	0.790	3						
151	0.821	3						
152	0.828	3						
153	1.083	3						.
154	1.119	3						.
155	1.123	3			..			.
156	1.195	3						
157	1.309	3						
158	1.404	3	.					
159	1.448	3						
160	1.538	3		.				
161	1.856	3					.	
162	1.953	3			..			.
163	2.084	3						.
164	2.091	3						..
165	0.512	2	.					.
166	0.572	2						.
167	1.809	2						
168	1.900	2						
169	0.237	2	.					
170	0.261	2						
171	0.337	2						
172	0.341	2						
173	0.342	2	.					

Table F-3 (continued)

CENSUS REGION		NORTH CENTRAL					
CENSUS DIVISION		EAST NORTH CENTRAL			WEST NORTH CENTRAL		
AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a					
174	0.382	2					
175	0.413	2					
176	0.435	2					
177	0.450	2					
178	0.489	2					
179	0.496	2					
180	0.552	2					
181	0.599	2					
182	0.614	2					
183	0.677	2					
184	0.758	2					
185	0.791	2					
186	0.908	2					
187	0.921	2					
188	0.957	2					
189	1.059	2					
190	1.261	2					
191	1.283	2					
192	1.291	2					
193	1.297	2					
194	1.353	2					
195	1.463	2					
196	1.507	2					
197	1.516	2					
198	1.525	2					
199	1.586	2					
200	1.594	2					
201	1.673	2					
202	1.866	2					
203	1.931	2					
204	2.030	2					
205	2.102	2					
206	0.333	1					
207	0.544	1					
208	0.199	1					
209	0.203	1					
210	0.216	1					
211	0.221	1					
212	0.239	1					
213	0.240	1					
214	0.241	1					
215	0.254	1					
216	0.266	1					
217	0.268	1					
218	0.283	1					
219	0.285	1					
220	0.293	1					
221	0.300	1					
222	0.327	1					
223	0.344	1					
224	0.352	1					
225	0.353	1					
226	0.358	1					
227	0.359	1					
228	0.362	1					
229	0.365	1					
230	0.370	1					
231	0.371	1					

Table F-3 (continued)

CENSUS REGION		NORTH CENTRAL					
CENSUS DIVISION		EAST NORTH CENTRAL			WEST NORTH CENTRAL		
AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences In Samples ^a					
232	0.372	1					
233	0.394	1					
234	0.405	1					
235	0.414	1					
236	0.419	1					
237	0.421	1					
238	0.422	1					
239	0.455	1					
240	0.463	1					
241	0.465	1					
242	0.504	1					
243	0.507	1					
244	0.510	1					
245	0.516	1					
246	0.545	1					
247	0.575	1					
248	0.584	1					
249	0.652	1					
250	0.653	1					
251	0.678	1					
252	0.683	1					
253	0.711	1					
254	0.744	1					
255	0.745	1					
256	0.767	1					
257	0.771	1					
258	0.775	1					
259	0.779	1					
260	0.786	1					
261	0.787	1					
262	0.821	1					
263	0.915	1					
264	0.929	1					
265	0.945	1					
266	0.960	1					
267	0.988	1					
268	1.017	1					
269	1.018	1					
270	1.037	1					
271	1.046	1					
272	1.061	1					
273	1.063	1					
274	1.070	1					
275	1.089	1					
276	1.091	1					
277	1.112	1					
278	1.121	1					
279	1.140	1					
280	1.174	1					
281	1.180	1					
282	1.197	1					
283	1.204	1					
284	1.204	1					
285	1.218	1					
286	1.223	1					
287	1.226	1					
288	1.243	1					
289	1.248	1					

Table F-3 (concluded)

Index	Average RRT	Number of Occurrences In Samples ^a	CENSUS REGION						
			CENSUS DIVISION			NORTH CENTRAL			
			AGE GROUP	EAST NORTH CENTRAL		WEST NORTH CENTRAL			
				0-14	15-44	45+	0-14	15-44	45+
290	1.289	1							
291	1.291	1							
292	1.296	1							
293	1.309	1							
294	1.311	1							
295	1.335	1							
296	1.342	1							
297	1.346	1							
298	1.348	1							
299	1.350	1							
300	1.363	1							
301	1.366	1							
302	1.377	1							
303	1.384	1							
304	1.386	1							
305	1.390	1							
306	1.403	1							
307	1.421	1							
308	1.422	1							
309	1.427	1							
310	1.433	1							
311	1.435	1							
312	1.457	1							
313	1.481	1							
314	1.492	1							
315	1.495	1							
316	1.499	1							
317	1.523	1							
318	1.525	1							
319	1.531	1							
320	1.545	1							
321	1.562	1							
322	1.583	1							
323	1.584	1							
324	1.589	1							
325	1.596	1							
326	1.602	1							
327	1.606	1							
328	1.607	1							
329	1.671	1							
330	1.695	1							
331	1.740	1							
332	1.761	1							
333	1.762	1							
334	1.776	1							
335	1.839	1							
336	1.907	1							
337	1.964	1							
338	1.973	1							
339	1.980	1							
340	1.981	1							
341	2.053	1							
342	2.063	1							
343	2.107	1							

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

Table F-4. Unidentified Peaks in the 15/50% Florisil Semivolatile Organic Analysis Data Set - Northeast Census Region

Index	Average RRT	Number of Occurrences In Samples \bar{x}	CENSUS REGION						
			CENSUS DIVISION			NORTHEAST			
			AGE GROUP	0-14	15-44	45+	0-14	15-44	45+
1.S.	1.000	46	.	.	.	.	.	.	.
1	1.920	44	.	.	.	.	.	.	.
2	0.419	42	.	.	.	.	.	.	.
3	1.052	41	.	.	.	.	.	.	.
4	1.007	40	.	.	.	.	.	.	.
5	0.452	38	.	.	.	.	.	.	.
6	1.616	38	.	.	.	.	.	.	.
7	0.402	37	.	.	.	.	.	.	.
8	0.633	35	.	.	.	.	.	.	.
9	1.742	35	.	.	.	.	.	.	.
10	0.449	34	.	.	.	.	.	.	.
11	1.569	34	.	.	.	.	.	.	.
12	2.034	34	.	.	.	.	.	.	.
13	1.692	33	.	.	.	.	.	.	.
14	1.682	32	.	.	.	.	.	.	.
15	1.710	32	.	.	.	.	.	.	.
16	0.437	29	.	.	.	.	.	.	.
17	0.606	29	.	.	.	.	.	.	.
18	1.238	29	.	.	.	.	.	.	.
19	1.657	28	.	.	.	.	.	.	.
20	1.187	28	.	.	.	.	.	.	.
21	1.453	28	.	.	.	.	.	.	.
22	0.839	27	.	.	.	.	.	.	.
23	1.665	27	.	.	.	.	.	.	.
24	0.647	26	.	.	.	.	.	.	.
25	1.128	26	.	.	.	.	.	.	.
26	2.059	26	.	.	.	.	.	.	.
27	1.953	25	.	.	.	.	.	.	.
28	1.440	25	.	.	.	.	.	.	.
29	1.490	24	.	.	.	.	.	.	.
30	1.722	23	.	.	.	.	.	.	.
31	1.430	22	.	.	.	.	.	.	.
32	0.932	21	.	.	.	.	.	.	.
33	1.115	21	.	.	.	.	.	.	.
34	1.223	21	.	.	.	.	.	.	.
35	2.009	20	.	.	.	.	.	.	.
36	0.589	20	.	.	.	.	.	.	.
37	1.147	20	.	.	.	.	.	.	.
38	1.567	20	.	.	.	.	.	.	.
39	1.235	19	.	.	.	.	.	.	.
40	1.178	18	.	.	.	.	.	.	.
41	0.555	18	.	.	.	.	.	.	.
42	0.990	17	.	.	.	.	.	.	.
43	1.319	17	.	.	.	.	.	.	.
44	1.629	16	.	.	.	.	.	.	.
45	0.876	16	.	.	.	.	.	.	.
46	0.680	15	.	.	.	.	.	.	.
47	0.912	15	.	.	.	.	.	.	.
48	1.086	15	.	.	.	.	.	.	.
49	1.089	15	.	.	.	.	.	.	.
50	1.556	15	.	.	.	.	.	.	.
51	1.980	15	.	.	.	.	.	.	.
52	1.929	14	.	.	.	.	.	.	.
53	0.982	14	.	.	.	.	.	.	.
54	1.809	14	.	.	.	.	.	.	.
55	1.027	13	.	.	.	.	.	.	.
56	1.210	13	.	.	.	.	.	.	.
57	1.500	13	.	.	.	.	.	.	.

Table F-4 (continued)

CENSUS REGION			NORTHEAST					
CENSUS DIVISION			MIDDLE ATLANTIC			NEW ENGLAND		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences in Samples ^a						
58	1.950	13	.		.			
59	0.586	12						
60	0.858	12	.	.	.			
61	1.511	12	.	.	.			
62	1.961	12		.				
63	2.014	12						
64	2.088	12	.	.	.			
65	0.996	11	.	.	.			
66	1.027	11	.	.	.			
67	0.218	11	.	.	.	.	.
68	0.398	11	.	.	.	.	.
69	1.475	11	.	.	.			
70	1.522	11	.	.	.			
71	1.542	11	.	.	.			
72	1.980	11	.	.	.			
73	0.745	10	.	.	.			
74	0.904	10	.	.	.			
75	1.105	10	.	.	.			
76	1.359	10	.	.	.			
77	0.429	9	.	.	.			
78	0.673	9	.	.	.			
79	0.897	9	.	.	.			
80	1.548	9	.	.	.			
81	1.989	9	.	.	.			
82	0.226	8	.	.	.	.	.
83	0.243	8	.	.	.	.	.
84	0.989	8	.	.	.			
85	1.149	8	.	.	.			
86	1.351	8	.	.	.			
87	1.973	8	.	.	.			
88	2.151	8	.	.	.	.	.
89	2.174	8	.	.	.	.	.
90	0.301	7	.	.	.			
91	0.392	7	.	.	.	.	.
92	0.520	7	.	.	.	.	.
93	0.672	7	.	.	.	.	.
94	1.198	7	.	.	.			
95	1.675	7	.	.	.			
96	1.889	7	.	.	.	.	.
97	0.492	6	.	.	.	.	.
98	0.758	6	.	.	.	.	.
99	1.175	6	.	.	.	.	.
100	1.202	6	.	.	.	.	.
101	1.308	6	.	.	.	.	.
102	1.472	6	.	.	.	.	.
103	1.531	6	.	.	.	.	.
104	1.966	6	.	.	.	.	.
105	2.137	6	.	.	.	.	.
106	1.531	5	.	.	.	.	.
107	0.374	5	.	.	.	.	.
108	0.450	5	.	.	.	.	.
109	0.540	5	.	.	.	.	.
110	0.547	5	.	.	.	.	.
111	0.559	5	.	.	.	.	.
112	0.573	5	.	.	.	.	.
113	0.762	5	.	.	.	.	.
114	0.918	5	.	.	.	.	.
115	1.062	5	.	.	.	.	.

Table F-4 (continued)

CENSUS REGION			NORTHEAST					
CENSUS DIVISION			MIDDLE ATLANTIC			NEW ENGLAND		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences in Samples ^a						
116	1.070	5						
117	1.105	5						
118	1.138	5						
119	1.175	5						
120	1.288	5						
121	1.460	5						
122	1.716	5						
123	1.729	5						
124	0.475	4						
125	0.507	4						
126	0.520	4						
127	0.667	4						
128	0.721	4						
129	0.832	4						
130	0.936	4						
131	1.061	4						
132	1.109	4						
133	1.153	4						
134	1.173	4						
135	1.277	4						
136	1.328	4						
137	1.580	4						
138	1.927	4						
139	1.979	4						
140	2.000	4						
141	0.319	3						
142	0.375	3						
143	0.609	3						
144	0.307	3						
145	0.346	3						
146	0.353	3						
147	0.487	3						
148	0.727	3						
149	0.739	3						
150	0.790	3						
151	0.821	3						
152	0.828	3						
153	1.083	3						
154	1.119	3						
155	1.123	3						
156	1.195	3						
157	1.309	3						
158	1.404	3						
159	1.448	3						
160	1.538	3						
161	1.856	3						
162	1.953	3						
163	2.084	3						
164	2.091	3						
165	0.512	2						
166	0.572	2						
167	1.809	2						
168	1.900	2						
169	0.237	2						
170	0.261	2						
171	0.337	2						
172	0.341	2						
173	0.342	2						

Table F-4 (continued)

CENSUS REGION			NORTHEAST					
CENSUS DIVISION			MIDDLE ATLANTIC			NEW ENGLAND		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences in Samples ^a						
174	0.382	2						
175	0.413	2						
176	0.435	2						
177	0.450	2						
178	0.489	2						
179	0.496	2						
180	0.552	2						
181	0.599	2						
182	0.614	2						
183	0.677	2						
184	0.758	2						
185	0.791	2						
186	0.908	2						
187	0.921	2						
188	0.957	2						
189	1.059	2						
190	1.261	2						
191	1.283	2						
192	1.291	2						
193	1.297	2						
194	1.353	2						
195	1.463	2						
196	1.507	2						
197	1.516	2						
198	1.525	2						
199	1.586	2						
200	1.594	2						
201	1.673	2						
202	1.866	2						
203	1.931	2						
204	2.030	2						
205	2.102	2						
206	0.333	1						
207	0.544	1						
208	0.199	1						
209	0.203	1						
210	0.216	1						
211	0.221	1						
212	0.239	1						
213	0.240	1						
214	0.241	1						
215	0.254	1						
216	0.266	1						
217	0.268	1						
218	0.283	1						
219	0.285	1						
220	0.293	1						
221	0.300	1						
222	0.327	1						
223	0.344	1						
224	0.352	1						
225	0.353	1						
226	0.358	1						
227	0.359	1						
228	0.362	1						
229	0.365	1						
230	0.370	1						
231	0.371	1						

Table F-4 (continued)

Index	CENSUS REGION		NORTHEAST					
	CENSUS DIVISION		MIDDLE ATLANTIC			NEW ENGLAND		
	AGE GROUP		0-14	15-44	45+	0-14	15-44	45+
	Average RFT	Number of Occurrences In Samples ^a						
232	0.372	1						
233	0.394	1						
234	0.405	1						
235	0.414	1						
236	0.419	1						
237	0.421	1						
238	0.422	1						
239	0.455	1						
240	0.463	1						
241	0.465	1						
242	0.504	1						
243	0.507	1						
244	0.510	1						
245	0.516	1						
246	0.545	1						
247	0.575	1						
248	0.584	1						
249	0.652	1						
250	0.653	1						
251	0.678	1						
252	0.683	1						
253	0.711	1						
254	0.744	1						
255	0.745	1						
256	0.767	1						
257	0.771	1						
258	0.775	1						
259	0.779	1						
260	0.786	1						
261	0.787	1						
262	0.821	1						
263	0.915	1						
264	0.929	1						
265	0.945	1						
266	0.960	1						
267	0.988	1						
268	1.017	1						
269	1.018	1						
270	1.037	1						
271	1.046	1						
272	1.061	1						
273	1.063	1						
274	1.070	1						
275	1.089	1						
276	1.091	1						
277	1.112	1						
278	1.121	1						
279	1.140	1						
280	1.174	1						
281	1.180	1						
282	1.197	1						
283	1.204	1						
284	1.204	1						
285	1.218	1						
286	1.223	1						
287	1.226	1						
288	1.243	1						
289	1.248	1						

Table F-4 (concluded)

CENSUS REGION			NORTHEAST					
CENSUS DIVISION			MIDDLE ATLANTIC			NEW ENGLAND		
AGE GROUP			0-14	15-44	45+	0-14	15-44	45+
Index	Average RRT	Number of Occurrences ^a In Samples						
290	1.289	1						
291	1.291	1						
292	1.296	1						
293	1.309	1						
294	1.311	1						
295	1.335	1						
296	1.342	1						
297	1.346	1						
298	1.348	1						
299	1.350	1						
300	1.363	1						
301	1.366	1						
302	1.377	1						
303	1.384	1						
304	1.386	1						
305	1.390	1						
306	1.403	1						
307	1.421	1						
308	1.422	1						
309	1.427	1						
310	1.433	1						
311	1.435	1						
312	1.457	1						
313	1.481	1						
314	1.492	1						
315	1.495	1						
316	1.499	1						
317	1.523	1						
318	1.525	1						
319	1.531	1						
320	1.545	1						
321	1.562	1						
322	1.583	1						
323	1.584	1						
324	1.589	1						
325	1.596	1						
326	1.602	1						
327	1.606	1						
328	1.607	1						
329	1.671	1						
330	1.695	1						
331	1.740	1						
332	1.761	1						
333	1.762	1						
334	1.776	1						
335	1.839	1						
336	1.907	1						
337	1.964	1						
338	1.973	1						
339	1.980	1						
340	1.991	1						
341	2.053	1						
342	2.063	1						
343	2.107	1						

^aTotal number of occurrences from all sample analyses (four census regions and nine census divisions).

APPENDIX G

LISTING OF THE ACORN PROGRAM

Trace of procedure ACORN

```
*
* [ *** PROCEDURE ACORN... J. ONSTOT
*
* LATEST REVISION 7/25/86
* ]
* EDLL $(-;W;E)
* SET1 #1;SET7 $1;SET8 $1
* IS
* FTP(DE;1;PRIN. 91/N;E)
* PHEAD/KX
* DOONE
* PRIN/KX(F;E)
* FTP(DE;1;$1. 91/N;RE;1;PRIN. 91;1;$1. 91;E)
*
EDLL $ (-;W;E)
SET1 #1
SET7 #1
SET8 #1
IS
*
* [ FIND THE INTERNAL STANDARD... MUST BE THE FIRST ENTRY IN LIBRARY.
* ]
*
* SETL SE;SET9 $8;SET8 TEMP;GETL
* CHR0/0(I;R;F1;#; $; &; G-30, 30; N3, 3; A1<; D-30, 30; E)
* IS1
* EDQL , $9(U#100;W;E)
* EDQL $9, FOUND(W;E)
* SETS $9
* QUAN(D, R; S; T; E)
*
GETL SE
SET9 $8
SET8 TEMP
GETL
CHR0 (I;R;F1;#; $; &; G-30, 30; N3, 3; A1<; D-30, 30; E)/0
IS1
# IS2
# ERASE; [ THE INBTERNAL STANDARD WAS NOT FOUND!!! ]
# QUIT
```

*
IS2

* IF IS2!28, IS1#1
* RETU IS1
*
IF IS2!28, IS1#1
RETU IS1

ERASE

QUIT

Trace of IS1 aborted.

EDQL , \$9 (U*100; W; E)

EDQL \$9, FOUND (W; E)

SETB \$9

QUAN (D; R; S; T; E)

FTP (DE; 1; PRIN. 91/N; E)

PHEAD /KX

* PRIN(@HE)

*

PRIN (@HE)

@HE

: T; ACORN LIBRARY SEARCH RESULTS; T20; ; T; FILENAME: ; #1; C; C
: T8; PEAK; T8; SCAN; T8; PEAKS; T9; BEST; T9; BEST; T9; BEST; T13; LIBRARY; T12; CU
: T8; NO. ; T8; NO. ; T8; /SCAN; T9; NBS; T9; NBS; T9; NBS; T13; CHOICE; T12; ENTRY; C
: T24; ; T9; FIT; T9; PURITY; T9; ENTRY; C; C
: E

T; ACORN LIBRARY SEARCH RESULTS; T20; ; T; FILENAME: ; #1; C; C
T8; PEAK; T8; SCAN; T8; PEAKS; T9; BEST; T9; BEST; T9; BEST; T13; LIBRARY; T12; CURR
T8; NO. ; T8; NO. ; T8; /SCAN; T9; NBS; T9; NBS; T9; NBS; T13; CHOICE; T12; ENTRY; C
T24; ; T9; FIT; T9; PURITY; T9; ENTRY; C; C
E

DOONE

* GETS; SET12 !1; SET11 !7

* [SAVE CURRENT SCAN# IN !12, .SL ENTRY NO. IN !11

*]

* EDLL FOUND(-; W; E)

* DOMAS [PRINT NO. OF MASS PEAKS TO STATUS REPORT

```

* ]
* SET4 SE; LIBTEST
* INLIB [ MAIN LIBRARY SEARCH ROUTINE ]
* ERASE; [ ADD THE CORRESPONDING SE ENTRY NO. TO $.LL
* ]
* EDLL $( $; W; E)
* SET1 !12; SETS $; SET7 !11
* LOOP
*
GETS
SET12 !1
SET11 !7
EDLL FOUND (-; W; E)
DDMAS
  * ENMA/OV
  * SET13 !18
  *
  ENMA /OV
  SET13 !18
SET4 SE
LIBTES
  * SETL FIT
  * LIBFIT/V
  * IF !26
  * SETL PURITY
  * LIBPUR/V
  * IF !26
  * RUN INSED
  *
  SETL FIT
  LIBFIT /V
    * LIBR(T800; X20; D; E)
    *
    LIBR (T800; X20; D; E)
  IF !26
  SETL PURITY
  LIBPUR /V
    * LIBR(T400; X0; D; E)
    *

```

```

LIBR (T400; X; D; E)
IF !26
RUN INSED
INLIB
*
* INSEED
* INNB
* [ NOT FOUND IN SEED OR NB LIBRARY. ADDING TO SEED... ]
* LIBR(ED; D; #SE; I; UNIDENTIFIED PEAK; ; ; ; ; SE; 1; ; E; E)
* NOTFND
* SET4 SE
* SET4 !24
* LINEEND
* UPRES
*
INSEED
*
* IF !4
* ERASE; [ THE PEAK WAS LOCATED IN THE SEED LIBRARY!!!
* ]
* SET10 !4
* EDLB , ZZ(I!1; E)
* DOMAS
* LIBR/V($ZZ; X; J1; D; E)
* SET4 !10
* SEEDFND
* SET8 TEMP
* CHR0/D(@DC)
* IF !28
* EDGL , $(U*100; A; E)
* SET8 #
* RETU INLIB
*
IF !4
ERASE
SET10 !4
EDLB , ZZ (I!1; E)
DOMAS
* ENMA/OV
* SET13 !18
*

```

000093


```

* SET4 SE;SET4 !24;
* LINEEND
* UPRES      (UPDATE RESPONSE FACTOR FOR NEW SE ENTRY
* ]
*
* RETU INLIB
*
SETL FOUND
SET4 NB
LIBNB /V
  * LIBR(X;D;J1<;E)
  *
  LIBR (X;D;J1<;E)
IF INNB!26, INNB
IF INNB!18, INNB#900
IF INNB!17, INNB#600
SETL
GETL
NBSFND
  * PRIN/KX(@FN)
  *
  PRIN (@FN)/KX
  @FN

```

```

: !11, 4; T4; ; !12, 4; T4; ; !13, 4; T4; ; !18, 4; T4; ; !17, 4; T4; ;
: !4, 5; T8; ; T; NBS; E

```

```

!11, 4; T4; ; !12, 4; T4; ; !13, 4; T4; ; !18, 4; T4; ; !17, 4; T4; ;
!4, 5; T8; ; T; NBS; E

```

```

EDLB ,SE (D; I' ; ; ; ; ; ; ; ; SE, 1; ; E; E)
SET4 SE
SET4 !24
LINEEN

```

```
* PRIN/KX(@FE)
*
PRIN (@FE)/KX
@FE
```

```
: T10; ; !24; C; E
```

```
T10; ; !24; C; E
```

UPRES

```
*
* SETB TEMP
* CHRO/D(I; #; N1, 1; G-2, 2; U20, 2; A1<; D-10, 10; E)
* IF !2B
* EDQL, FOUND(U*100; A; E)
* QUAN FOUND(D; R; S; T; E) [ NEED THIS TO SET LIB RRT FOR FUTUR
* EDQL FOUND (-2; W; E)
* EDQL , $(U*100; A; E)
```

```
*
* SETB $
```

```
*
SETB TEMP
CHRO (I; #; N1, 1; G-2, 2; U20, 2; A1<; D-10, 10; E)/D
IF !2B
EDQL , FOUND (U*100; A; E)
QUAN FOUND (D; R; S; T; E)
EDQL FOUND (-2; W; E)
EDQL , $ (U*100; A; E)
SETB $
```

RETU INLIB

```
LIBR (ED; D; #SE; I; UNIDENTIFIED PEAK; ; ; ; ; ; ; ; ; ; ; SE, 1; ; ; E)
NOTFND
```

```
* PRIN/KX(@NF)
*
PRIN (@NF)/KX
@NF
```

: !11, 4; T4; ; !12, 4; T4; ; !13, 4; T4; ; !18, 4; T4; ; !17, 4; T4; ;
: !4, 5; T7; ; T; UNKN; E

: !11, 4; T4; ; !12, 4; T4; ; !13, 4; T4; ; !18, 4; T4; ; !17, 4; T4; ;
: !4, 5; T7; ; T; UNKN; E

SET4 SE

SET4 !24

LINEEN

* PRIN/KX(@FE)

*

PRIN (@FE)/KX

@FE

: T10; ; !24; C; E

T10; ; !24; C; E

UPRES

*

* SET8 TEMP

* CHRO/D(I; #; N1, 1; G-2, 2; U20, 2; A1<; D-10, 10; E)

* IF !28

* EDGL, FOUND(U*100; A; E)

* QUAN FOUND(D; R; S; T; E) [NEED THIS TO SET LIB RRT FOR FUTURE SEA

* EDGL FOUND (-2; W; E)

* EDGL , \$(U*100; A; E)

*

* SET8 \$

*

SET8 TEMP

CHRO (I; #; N1, 1; G-2, 2; U20, 2; A1<; D-10, 10; E)/D

IF !28

EDGL , FOUND (U*100; A; E)

QUAN FOUND (D; R; S; T; E)

EDGL FOUND (-2; W; E)

EDGL , \$ (U*100; A; E)

000097

77
SETB \$

ERASE

EDLL \$ (\$; W; E)

SET1 !12

SETS \$

SET7 !11

LOOP

PRIN (F; E)/KX

FTP (DE; 1: \$1.91/N; RE; 1: PRIN. 91; 1: \$1.91; E)

000098